GLOUCESTERSHIRE

GLOUCESTERSHIRE
COUNTY COUNCIL

ANNUAL REPORT

of the County Medical Officer
of Health and Principal School
Medical Officer

1972

INDEX

To the Chairmen and Members of the Health and Education Committees

I have pleasure in submitting my Report for 1972 on the Health and School Health Services of the Administrative County.

The saddest event for the Department during the year was the death on 3rd October, of the Chairman of the Health Committee, Alderman the Hon. Mrs. H. W. Bathurst. We had worked very closely together during the last three years and I had come greatly to respect her wide experience, her kindly nature and, above all, her complete integrity.

Statistics

This subject is dealt with in more detail on pages 14 and 15. The gradually increasing population of the County continues to be due more to migration than to excess of births over deaths. Each year since 1965 there has been a fall in the birth rate, and the largest single decrease occurred in 1972. The infant mortality rate in the Administrative County, though identical with the figure for England and Wales, is the highest for nine years and requires investigation. The general downward trend in infant mortality rates over the last two decades is in marked contrast to the rising death rates in adult life from what can be described as diseases of modern civilisation. More men are now dying from cancer of the lung than from any other malignant condition, and the proportion of women dying from this disease is also increasing. Numerically, the most important cause of death is ischaemic heart disease. This generic term, which includes angina and coronary thrombosis, means literally that the heart itself is deprived of blood. The aetiology of ischaemic heart disease is not so clearly established as is lung cancer, but there is now little doubt that the three most important controllable factors are cigarettes, obesity and lack of exercise. To an increasing extent, the avoidance of premature death is coming within individual control.

Administrative and Staff Changes

I reported last year that approval had been given to a three tier management structure in the Authority's nursing services. The top tier now consists of a Director of Nursing Services and a Divisional Nursing Officer, in place of the two posts of Superintendent Health Visitor and Nursing and Midwifery Superintendent. In May, we had pleasure in appointing Miss S. Nicholls, Director of Nursing Services with North Riding County Council, to the new post of Director in this Authority. Shortly before this appointment, Mrs. I. E. Lyle, who had been Superintendent Health Visitor for the previous five and a half years, became a Nursing Officer in the Department of Health and Social Security. Although we were very sorry to lose her many talents, we were delighted to see her rewarded in this way. Miss G. E. Brownhill, who had been Nursing and Midwifery Superintendent for the past five years, was promoted to the new post of Divisional Nursing Officer. She now has responsibility, under the Director, for the health visiting service, in addition to her previously held responsibility for the home nursing and midwifery services.

The middle management level comprises five Area Nursing Officers whose areas generally correspond with the Social Services Areas. Four of these posts had been previously filled, and the fifth appointment was made in the year under review. Approval was also given in principle to the upgrading, in 1973, of ten nurses to become first-line managers. This will then complete the management structure which is designed to achieve functional integration because, at each level, the nursing officers will have responsibility for all aspects of the nursing service. For the first time in the history of the County, there will be a single administrative structure for the health visiting, home nursing and district midwifery services. This should increase the efficiency of the Authority's nursing services and also assist in their integration with the hospital nursing services in 1974.

Miss F. E. Fortnam, the Health Education Officer, retired in September after twenty-four years' service in the County, first as a health visitor and later as Deputy Superintendent Health Visitor. She was Health Education Officer for nine years and brought immense energy and enthusiasm to the post. I paid tribute in my last Report to her work in attempting to assess the value of specific projects. Miss Fortnam's retirement coincided with a vacancy in the corresponding post in Gloucester City, and because of the

impending reorganisation of the National Health Service, it was agreed to advertise for a single Health Education Officer for both Authorities at an increased salary. In the face of strong national competition, the successful applicant was the County's Assistant Health Education Officer, Mrs. R. H. Rice.

I reported last year that it had been possible to bring together into one Child Health Section the administrative and clerical staff concerned with the child health clinics and the school health work. This merger has now been completed by re-arranging the duties of the two Senior Medical Officers who were directly concerned with the administration of these services. Dr. Mary Seacome became Information and Research Officer and has a particularly valuable part to play in helping to establish the information systems which are required in the reorganised National Health Service. Dr. Marian Parkinson assumed responsibility for the combined Child Health Service and this is functioning excellently under her leadership.

In my 1971 Report I referred to the agreement which had been reached with the District Councils to reduce, from five to four, the number of divisions for health administration. This agreement was subject to the appointment of deputies but initially no candidate of sufficient experience came forward. In March, 1972, Dr. R. M. Dykes, who was Medical Officer of Health for Luton prior to his retirement to Gloucestershire, accepted a part-time appointment and undertook to deputise in all four divisions. We are indeed fortunate to secure the services of a doctor so experienced in this type of work.

Health Centres

In the year under review the staff spent more time on the provision of health centres than in any previous year. During 1972, one health centre (Kingswood) was completed and the building of another (Stroud) began. Discussions continued with the technical officers and the doctors concerned in respect of four centres (Berkeley, Newent, Lydbrook and Cinderford) and loan sanction was obtained for the first two of these. Negotiations for sites continued in respect of two centres (Oldland Common and Tewkesbury) and a search for a suitable site began for another (Lydney). Requests were received for four centres (Downend, Lechlade, Stonehouse and Chipping Sodbury), and the Health Committee asked that provision for a fifth be made in a development plan (Hardwicke). The new Area Health Authority will take over any loan charges on existing and proposed health centres, and in order to maintain the momentum in the next two or three years, it is important that a comprehensive programme is transferred in April, 1974.

Family Planning

In the past, the whole of the Authority's family planning service has been provided on an agency basis by the Family Planning Association which administers 15 static and 3 mobile clinics in the County. During the year under review, the agency arrangement continued, but, with the agreement of the Association, the Authority initiated a domiciliary service and opened a further 5 clinics (4 static and 1 mobile).

The essence of the agency agreement is that the Authority pays the Association an annual fee (currently £5) for every woman resident in the Administrative County who attends a clinic and who is given contraceptive treatment because there are either medical or social reasons for avoiding pregnancy. There can be no precise definition of a social case in this context but it is broadly taken to mean a woman whose family is already receiving support from public funds, for example, free school meals. Contraceptive treatment can be prescribed free by general practitioners to their National Health Service patients where there is a medical reason for avoiding pregnancy. If, however, the reason is social rather than medical, the woman must pay the full cost of her contraceptive supplies. The doctor is also entitled to a fee, although this is often waived.

In order to help to correct this anomaly, a scheme was introduced last May in which the Authority pays selected general practitioners the same annual fee for the contraceptive treatment of their social cases as it would pay to the Family Planning Association if the same woman attended a clinic. Contraceptive pills and coils are purchased in bulk and supplied to the general practitioners at the cost price, which is then deducted from the doctor's fee. By the end of the year, 61 general practitioners had joined the scheme and 297 patients had received treatment under it. So far as is known, this scheme is unique in the country and has created widespread interest.

The Family Planning (Amendment) Act, 1972, received the Royal Assent in October. The following month the Health Committee took advantage of the additional powers granted under this Act and resolved to establish a vasectomy service in the County. In any family where the mother would qualify for free contraceptive treatment under the above scheme, the Authority will now pay for the sterilisation of the father if this is considered to be the preferred alternative. This new service, which will be described in the next Annual Report, is thus complementary to the present arrangements.

Ambulance Service

Every ambulance man on the County's permanent staff holds a Certificate in Ambulance Aid (advanced first aid) and the vehicles are among the best equipped in the country. There are, however, some emergency procedures which require special equipment which can be used only by a doctor or specially trained nurse. In February, with the agreement of the appropriate authorities, a Mobile Resuscitation Unit was stationed at Frenchay Hospital and another at Cheltenham General Hospital. In addition to equipment which is standard in all the County's ambulances, each of these two vehicles carries a defibrillator and oscilloscope, emergency drugs and intubation equipment. The unit at Frenchay was due to the initiative of three Consultant Anaesthetists to the United Bristol Hospitals, Dr. P. J. F. Baskett, Dr. Andrew Diamond and Dr. John Zorab, and the specialised equipment in the vehicle was purchased by the Regional Hospital Board. The unit at Cheltenham was due to the initiative of the family of the late T. D. H. Andrews and they generously donated the resuscitation equipment as a memorial to him. The Hospital Management Committees and the staffs at the two hospitals have given continued support to the units, particularly in the training of the ambulancemen. The hospitals are linked by land line to the Almondsbury and Cheltenham Ambulance Stations, and the units are called out to any accident or medical emergency occurring in the County which can be reached within about ten minutes. Depending on the nature of the accident or emergency, a doctor or specially qualified nurse travels on the vehicle. Ambulance men are attached to each unit for three to six months, and during this time they work and study in the hospital. A working party of consultants and senior nursing officers from the two hospitals, together with the County Ambulance Officer, Mr. A. W. Johnston, and the Training Officer, Mr. A. H. Clifford, meet regularly to review the functioning of the units, with particular reference to training requirements. I know of no other resuscitation units in the country providing such a comprehensive service to the public or such a depth of training for ambulance personnel. As a direct result of these units, the Ambulance Service now contains some of the highest trained personnel in the country.

In June and July, a local newspaper extensively reported allegations that, due to their age and standard of maintenance, the Authority's ambulances were a danger to patients. These allegations, which must have caused distress to many patients and relatives, were shown to be entirely without foundation. In November, the Health Committee reviewed the detailed information which had been collected on vehicle replacement and maintenance, and resolved that no changes in policy were necessary.

Chiropody Service

In my Report for 1971, I referred to the depressing state of this service with requests for treatment rising and recruitment of chiropodists falling. It became increasingly clear in the early months of 1972 that the decline in the quality of the service was likely to continue unless radical changes were made. A comprehensive report on the service was considered by the Health Committee in May, and the Committee set up a Working Party to study the report in detail and make recommendations. The Working Party's report was presented to the Health Committee in September and accepted without amendment. The full report is reproduced on pages 34 and 35 and I refer here only to the more far-reaching recommendations. It was agreed radically to improve the working conditions of the chiropodists over the next three years by improving the facilities at the more frequently used clinics and closing down most of the clinics which were open only once per fortnight or per month. Because this change in policy would inevitably result in many patients having further to travel, it was agreed that transport should be provided or paid for in appropriate cases. It was important to explain to patients the reasons for this change in policy, and the Community Council through their Old People's Welfare Committees has been

particularly helpful in this respect. It was also agreed to recommend the appointment of Area Chiropodists and so provide a better career structure. This new policy has already led to measurable improvements in the service. During the last two months of the year there was, for the first time in many years, a full establishment of chiropodists, and the interval between treatments, which had become four months and longer in some parts of the County, began to decrease.

Dental Service

The report on the dental service indicates the results of enthusiastic team-work under Mr. Smyth's leadership. The two fundamental ways of enhancing the dental health of children is to improve the diet, or to increase the resistance of the teeth by augmenting the natural intake of fluoride. Dental health education is the basis of the first approach and Mr. Pengelly's comprehensive survey of caries prevalence indicates that the quiet perseverance of Mrs. Miles and her team appears to be gradually having an effect. In the absence of fluoridation, three studies are reported for increasing fluoride intake. These are (1) topical application which is shown to be too costly in skilled resources to be of general use ; (2) mouth-rinsing, where the results will not be available for some years, and (3) the distribution of fluoride tablets which will be reported on next year. There will be few, if any, local authority dental departments which can match this record of research.

National Health Service Reorganisation

A White Paper was published at the beginning of August, and a Bill to reorganise the National Health Service was presented to Parliament in November. The Bill proposes the abolition of Boards of Governors of Teaching Hospitals, Regional Hospital Boards, Hospital Management Committees, Executive Councils and Local Health Authorities, and their replacement by a two tier structure of ad hoc bodies under the Department of Health and Social Security. The first tier will consist of fourteen Regional Health Authorities (RHAs) and the second will consist (outside London) of 75 Area Health Authorities (AHAs). General practitioners will retain their independent contractual status and the Executive Council will be replaced by a Family Practitioner Committee of similar composition. The School Health Service will, for the first time, become part of the National Health Service. The boundaries of the RHAs will be similar to those of the present Regional Hospital Boards, but will be adjusted to ensure that no regional boundary divides the area of an AHA. This will mean that the hospitals in Moreton-in-Marsh, Bourton-on-the-Water, Northleach, Fairford and Cirencester, which are at present in the Oxford Region, will become the responsibility of the Gloucestershire AHA and the South Western RHA. Each RHA will probably consist of about fifteen members, all appointed by the Secretary of State but including persons nominated by the local authorities in the region.

Each AHA will probably also consist of about fifteen members and a number of them (not fewer than four is proposed) will be nominated by the matching local authority. This common membership will help to ensure cooperation and coordination of the two authorities. The Bill proposes that statutory Joint Collaboration Committees shall be established in each area consisting of members of the health and local authorities, and served by senior officers of the respective authorities.

There will be one Committee for collaboration with the matching authority, dealing particularly with joint planning of health and social services and with the child health and education services. There will be a second Joint Collaboration Committee established for each non-metropolitan County, and whose local authority membership will be drawn mainly from the new district councils. This Committee will be concerned with ensuring cooperation between the AHA's services and the related environmental services, particularly housing. Membership of the AHA will also include at least one doctor and one nurse, and the authority will receive advice from professional advisory committees. Such committees were required by the National Health Service Act of 1946 to advise each Executive Council and so are a well-established part of the professional advisory machinery.

In the area of each AHA there is to be at least one Community Health Council. This Council, which will be statutory, will probably consist of twenty to thirty members. Half the membership will be appointed by the new district councils; one-third by selected voluntary bodies and one-sixth by the AHA. The

Council represents the voice of the consumer in the planning and administration of the local health services, and the members will have certain rights, such as entry into hospitals and direct access to the senior officers of the AHA.

Each AHA will consist of one or more health districts, and the size of a district is largely determined by the catchment area of a district general hospital. There are therefore likely to be two health districts in the new Gloucestershire, one based on the catchment area of the Gloucester, Stroud and the Forest group of hospitals, and the other based on the Cheltenham group. In each health district there will be a District Medical Committee consisting of equal numbers of hospital consultants and general practitioners, elected by their colleagues. There will be no statutory health authority at district level, but the primary planning unit will be a District Management Team consisting of a consultant and a general practitioner nominated by the District Medical Committee and four officers appointed by the AHA, namely, an administrator, a community physician, a finance officer and a nursing officer. These six people will be jointly responsible to the AHA for formulating plans for the health services in the district and for coordinating the implementation of the plans which are subsequently approved by the AHA and RHA. All decisions of the District Management Team must be by consensus and so every member of the Team has, in effect, a veto. Any serious disagreement will be reported to the AHA for resolution. Each District Management Team will be advised by a number of health-care planning teams on the needs of certain groups such as the elderly and the mentally handicapped. These health-care planning teams will be multi-disciplinary and their composition will vary with the task they have to perform, but will probably always include doctors and nurses from hospital and from the community, and representatives of local authority services, particularly social services.

The reorganised National Health Service is to come formally into existence on 1st April, 1974, when the RHAs and AHAs take over responsibility from the present statutory bodies. The RHAs and AHAs will probably be appointed in " shadow " form in the autumn of 1973. In order to carry out as much as possible of the necessary preparatory work, Joint Liaison Committees (JLCs) have been established for each new area and each new region. It was recommended that the Area JLC should consist of two representatives from each of the statutory health authorities who are responsible for services in the present area, together with two representatives from the appropriate Regional Hospital Board. In addition to the Board there are, in Gloucestershire, eight health authorities concerned (4 Hospital Management Committees, 3 Local Authorities and 1 Executive Council). Each of these authorities agreed to nominate one member and one officer to the Gloucestershire Area JLC, the member in most cases being the Chairman of the Committee or Council concerned, and the officer being the appropriate Chief Officer. The late Mrs. Bathurst was appointed Chairman when the Committee first met in August, and I had the honour to succeed her. The Secretary is Mr. J. W. Fitzpatrick, Group Secretary of the Cheltenham Group of Hospitals, and the Deputy Secretary is Mr. E. T. C. Chell, Clerk to the Gloucester City and County Executive Council. Initially, the County Council was also represented on the Avon JLC by one member and one officer. The health authorities concerned in Avon are so numerous, however, that the JLC was too large to function efficiently. The Committee therefore decided that each authority should have only one representative and that this should in each case be an officer. The Gloucestershire and Avon JLCs have each established a number of Working Parties consisting of officers from each of the authorities concerned. The Regional JLC, which consists of three representatives from each Area JLC, has also set up Working Parties. Each authority is responsible for keeping its staff informed of all recommendations of the JLC which are likely to affect them, and a Joint Consultative Group consisting of representatives of staff associations and trade unions has been established by the Gloucestershire JLC. The Secretaries of the JLCs also publish information sheets from time to time. A great deal of preparatory work in collecting information and identifying problems has already been accomplished, and the shadow AHAs and RHAs will look to their JLCs for information and guidance. It should be noted, however, that the JLCs are advisory bodies. They have no power to pre-empt decisions and they will cease to exist when the new health authorities are established in shadow form.

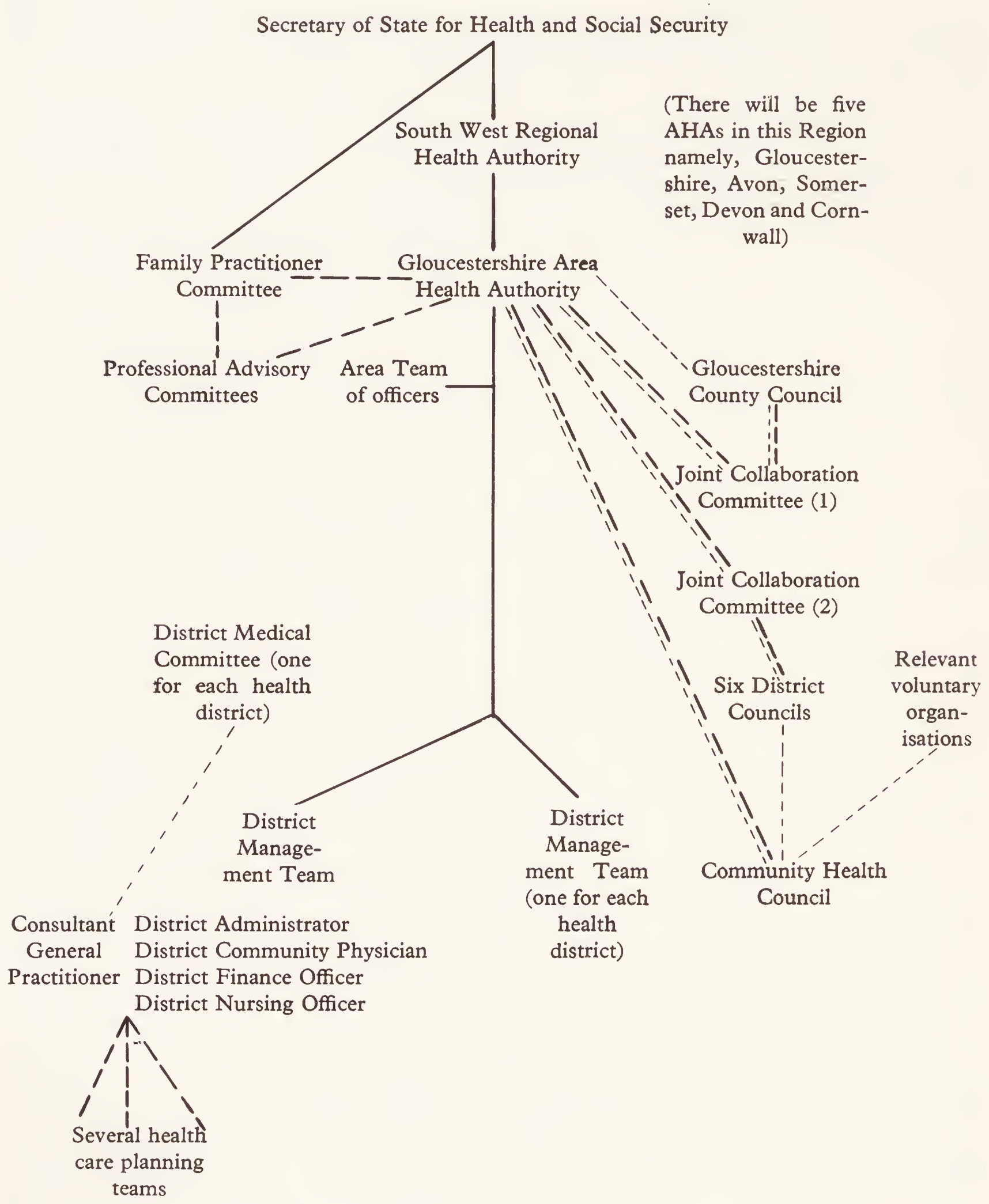
The future is challenging in that, for the first time in this country, a single authority will be responsible for planning and coordinating the personal health services of an area. By virtue of their membership of the health-care planning teams and of the District Management Teams, clinicians will play a major

role in the comprehensive planning of these services. In any reorganisation, however, there are likely to be disadvantages. The new structure may be less flexible and provide less encouragement for the initiation of new schemes. Greater efforts will certainly be needed to maintain the necessary links with local authorities, particularly in respect of social and education services. Reorganisation inevitably results in anxiety and insecurity in those staffs who are likely to be significantly affected by the transfer, and this must, if only in the short-term, have an adverse effect on the service.

I have set out the proposed arrangements at some length because they represent the most radical change since the present tripartite structure was established twenty-five years ago, and could determine the pattern of health services for the remainder of this century. The sole object of reorganisation is to provide, with the same resources, a better service to patients and to the community as a whole, and in these terms must the value of reorganisation ultimately be judged.

The probable structure of the re-organised health service is set out diagramatically on the next page.

THE PROBABLE STRUCTURE OF THE HEALTH SERVICE



The continuous lines indicate managerial responsibility. The heavy dotted lines indicate the right to advise, and the light dotted lines indicate the right to be represented.

Acknowledgements

In the absence of team-work, little can be accomplished in the field of public health, and it is a pleasure to refer to the help and cooperation which have been forthcoming, both within the Department and outside it. I am grateful to the staff for their loyal support during the year, and in particular to Dr. Barnes and Mr. F. B. Wilton who have also collated and edited this Report. Under the leadership of Mr. Rogers, the Clerk and Chief Executive Officer, the excellent relations with the Management Team and with other Chief Officers and Heads of Departments and their staffs have continued during the year. This relationship is particularly important with the Departments of Education and Social Services, and I gladly record my thanks for the help received from the Chief Education Officer, Mr. Milroy, and the Director of Social Services, Mr. Nichols, and their staffs. The close relationships with the many statutory and voluntary organisations concerned with the health services have been maintained and strengthened. These organisations in Gloucestershire appear to be coming even closer together and this augurs well for the health services in the new County. Finally, I am most appreciative of the kindness and support I have received from the Council, and in particular from the Chairmen and Members of the Health and Education Committees.

ALLAN WITHNELL,
County Medical Officer of Health and
Principal School Medical Officer.

Quayside Wing,
Shire Hall,
Gloucester. GL1 2HZ.

April, 1973.

STAFF

as at 31st December, 1972

County Medical Officer of Health and Principal School Medical Officer	A. Withnell, B.Sc., M.D., F.F.C.M., D.P.H.
Deputy County Medical Officer of Health and Deputy Principal School Medical Officer	R. Barnes, M.A., M.R.C.S., L.R.C.P., M.F.C.M., D.P.H.
Senior Medical Officer, Information and Research	Mary P. S. Seacome, M.A., B.M., B.Ch., M.F.C.M., D.P.H.
Senior Medical Officer, Child Health	Marian Parkinson, M.B., B.S., M.F.C.M., D.P.H.
Senior Assistant County Medical Officer of Health and Departmental Medical Officer	*M. J. Gryspeerdt, M.B., B.S., D.P.H.
Divisional Medical Officers ... ... (also District Medical Officers of Health)	R. F. Barclay, M.B., B.S., M.F.C.M., D.P.H. R. E. A. S. Hansen, M.A., M.B., B.Ch., M.F.C.M., D.P.H. A. T. Hunt, M.B., B.S., M.R.C.S., L.R.C.P., M.F.C.M., D.P.H. W. A. Knox, M.B., B.Ch., B.A.O., D.P.H.
Deputy Divisional Medical Officer	R. M. Dykes, M.A., M.D., D.P.H.
Assistant Medical Officers and Departmental Medical Officers	*Katharine E. M. Allen, M.A., M.R.C.S., L.R.C.P. *Patricia A. Boulton, M.B., Ch.B., D.(Obst.), R.C.O.G. S. C. Buck, M.A., M.B., B.Chir., M.R.C.S., L.R.C.P., D.P.H. Angela Davis, M.B., Ch.B. *Beryl A. Davies, B.Sc., M.B., Ch.B. *Margaret Davies, M.B., Ch.B. *Susan Gage, M.B., Ch.B. *Veronica A. Hall, M.B., Ch.B., D.R.C.O.G. S. S. Hart, B.A., M.R.C.S., L.R.C.P. *Ann L. Johnson, M.B., Ch.B. *Gwyneth A. Jones-Davies, M.B., Ch.B. *Coralie A. A. Morrison, M.B., Ch.B. *Mary J. O. O'Malley, M.B., Ch.B., B.A.O., B.Sc. Mary R. Paine, M.R.C.S., L.R.C.P. M. H. Ryder, M.R.C.S., L.R.C.P., D.P.H. Dorothy Sell, M.B., B.S. *Catriona F. Smith, M.B., Ch.B. *Christine P. Temme, M.B., B.S., L.R.C.P., M.R.C.S. Hebe F. Welbourn, M.D., D.C.H. Joyce D. Wood, M.B., B.S., D.R.C.O.G., D.C.H., D.P.H.

Principal Dental Officer	J. F. A. Smyth, L.D.S.
Deputy Principal Dental Officer	J. P. B. Pengelly, L.D.S., D.D.H., D.D.P.H.
Area Dental Officers	D. K. Stables, B.D.S. G. N. Willetts, L.D.S.
Orthodontists	G. D. Everard, L.D.S. *Mrs. H. C. Peace, B.D.S., L.D.S., D.Ortho. *Mrs. J. M. Popplewell, L.D.S. *Mrs. G. Yemm, B.D.S.
Senior Dental Officers	A. C. Bloomfield, L.D.S. Miss P. A. Courthill, B.D.S. D. N. de Gruyther, L.D.S. Mrs. H. Frenkel, B.D.S. Miss S. M. Hunt, B.D.S. R. D. Jefferies, L.D.S. *N. Killingback, B.D.S.
Dental Officers	A. G. Barker, B.D.S. *Mrs. M. E. Bell, L.D.S. *Mrs. S. Cole-Morgan, B.D.S. W. M. Ellison, B.D.S., L.D.S. *W. M. Evans, B.D.S. *Mrs. A. P. Hutton, B.D.S. Mrs. M. E. Jones, B.D.S. Mrs. M. J. Leech, L.D.S. Mrs. P. J. Leggott, B.D.S. R. R. Merritt, L.D.S. G. H. Owen, B.D.S. *Mrs. B. Pitter, B.D.S. M. R. Richards, B.D.S. R. H. Salt, B.Sc., B.D.S., L.D.S. *Mrs. Y. L. M. Thomas, B.D.S. P. G. Yates, B.D.S.
Dental Auxiliaries	3
Senior Dental Surgery Assistants	4
Dental Surgery Assistants	31 (equivalent to 22.8 full time)
Dental Health Education Officer	Mrs. U. Y. Miles, A.L.A.M.
Dental Health Assistants	2 part-time
County Dental Laboratory	1 Chief Technician 2 Maxillo-Facial Technicians 1 Technician 2 Apprentices

*indicates part-time.

Director of Nursing Services	Miss S. Nicholls, S.R.N., S.C.M., H.V., N.D.M., B.T.A.
Divisional Nursing Officer	Miss G. E. Brownhill, S.R.N., S.C.M., H.V., Q.N.
Area Nursing Officers	Miss E. Hawkins, S.R.N., Q.N., H.V. Mrs. E. M. Meredith, S.R.N., S.C.M., H.V. Mrs. L. Midwinter, S.R.N., S.C.M., H.V. Miss A. R. Radcliffe, S.R.N., S.C.M., H.V., Q.N. Miss J. Twemlow, S.R.N., S.C.M., Q.N., M.T.D.
Health Visitors	82 and 20 part-time
Nurses assisting Health Visitors	20 part-time
District Nurse/Midwives/Health Visitors ...	14
District Nurse/Midwives	93 and 8 part-time
Home Nurses	S.R.N. 45 and 5 part-time S.E.N. 2 full-time and 5 part-time
District Midwives	10
Nursing Auxiliaries	11
Orthopaedic After-Care Sisters	1 and 8 part-time
County Public Health Officer	R. H. Craig, F.I.P.H.E., M.R.I.P.H.H., M.A.P.H.I.
Assistant County Public Health Officer ...	L. G. Norman, S.R.N., M.A.P.H.I.
County Ambulance Officer	A. W. Johnston, A.I.A.O.
Deputy County Ambulance Officer	G. P. Turnbull
Health Education Officer	Mrs. R. H. Rice, S.R.N., R.S.C.N., S.C.M., H.V.
Deputy Health Education Officer	Vacancy
Senior Audiology Technician	A. J. Deacon, M.S.A.T., R.M.A.
Audiology Technician	Mrs. R. Broomhead, M.S.A.T.
Senior Speech Therapist	Mrs. M. D. Heaven, L.C.S.T.
Speech Therapists	3 and 12 part-time
Chief Chiropodist	D. E. Boden, M.C.H.S., S.R.Ch.
Deputy Chief Chiropodist	J. H. Spencer, M.C.H.S., S.R.Ch.
Senior Chiropodists	10
Part-time Chiropodists	8
Administrative Officer	F. B. Wilton, A.C.I.S.
Deputy Administrative Officer	F. H. Livesey, D.P.A.
Senior Administrative Assistants	R. Hayter, D.M.A. J. Yates, D.M.A.

DELEGATED AUTHORITY—BOROUGH OF CHELTENHAM

Medical Officer of Health	T. O. P. D. Lawson, M.D., D.R.C.O.G., D.P.H.
Deputy Medical Officer of Health	K. Matthews, M.B., B.S., D.P.H.
Senior Medical Officer of Health	Brenda G. King, M.B., B.S.
Area Dental Officer	P. B. Stone, L.D.S.
Dental Officers	J. B. Clarke, L.D.S. T. H. Jarosz, B.D.S.
Dental Surgery Assistants	5 (equivalent to 3.4 full-time)
Area Nursing Officer	Miss M. Bevan, S.R.N., S.C.M., H.V.
Health Visitors	13 and 1 part-time

Nursing and Midwifery

Assistant Superintendent	Miss M. E. Gabriel, S.R.N., S.C.M.
Home Nurses	19 and 2 part-time
Nursing Auxiliaries	3
Midwives	6 and 2 part-time
Health Centre	2 part-time Nurses
Chiropodists	7 part-time
Speech Therapists	Miss A. M. Fulford Miss R. K. Sneezum
Physiotherapist	Mrs. H. Sarma
Administrative Officer	W. H. G. Meakins

SECTION A

STATISTICS AND SOCIAL CONDITIONS OF THE COUNTY

Area (in acres) :—		
Urban	24,246	
Rural	746,048	
		770,294
Population :—		
Registrar-General's Estimate (Mid-year, 1972) :—		
Urban	185,990	
Rural	385,080	
		571,070
Rateable Value (1st April, 1972)		£22,509,827
Sum represented by a penny rate		£223,995

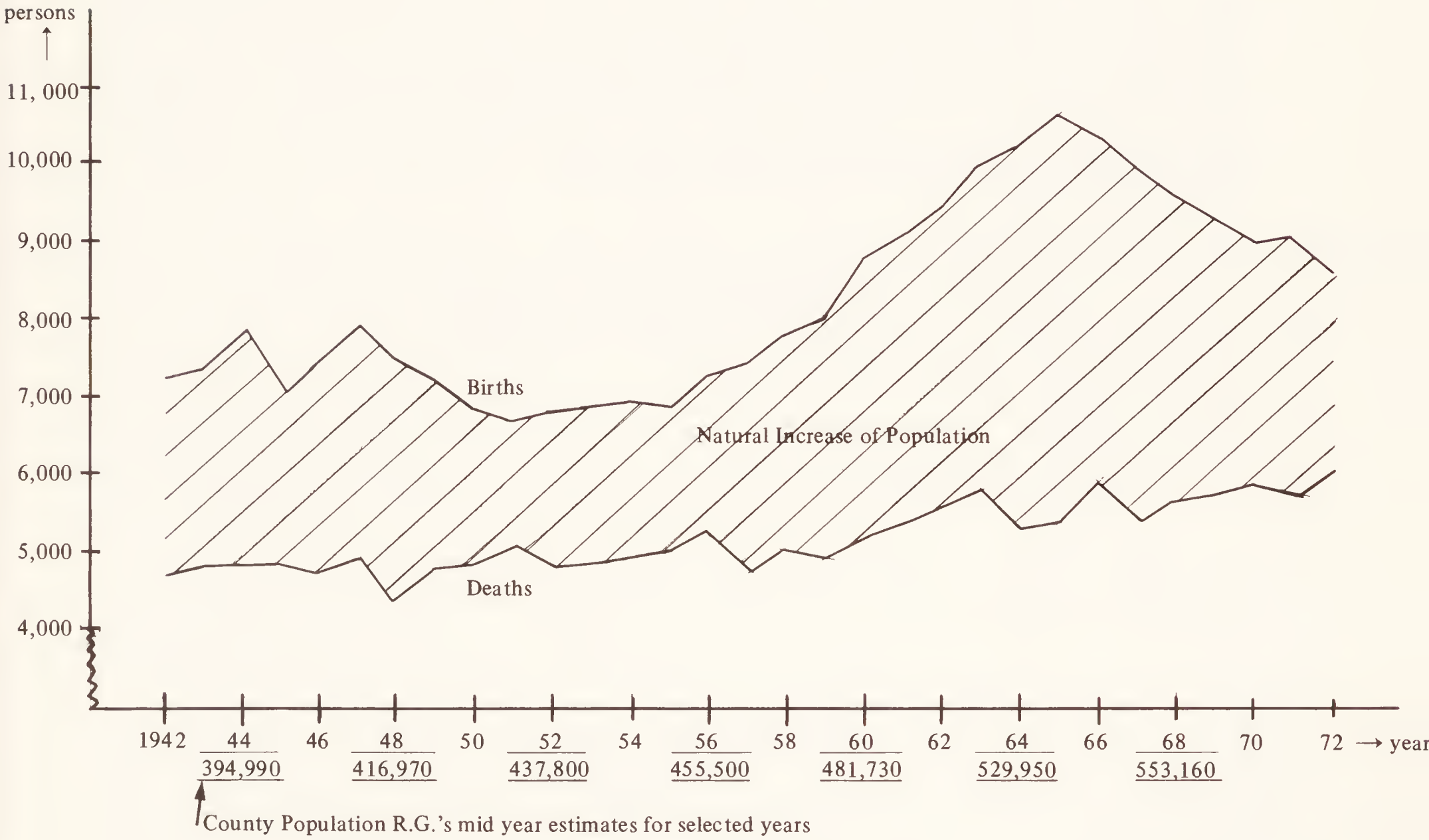
Extracts from Vital Statistics :—	
Live Births—Legitimate	8,084
Illegitimate	504
Total	8,588
Rate per 1,000 population	15.0
Illegitimate live births per cent of total live births	5.9
Stillbirths	74
Rate per 1,000 total live and stillbirths	8.5
Total live and stillbirths	8,662
Infant deaths (deaths under 1 year)	148
Infant mortality rates	
Total infant deaths per 1,000 total live births	17.2
Legitimate infant deaths per 1,000 legitimate live births	16.6
Illegitimate infant deaths per 1,000 illegitimate live births	27.8
Neo-natal mortality rate (deaths under 4 weeks per 1,000 total live births)	12.1
Early Neo-natal mortality rate (deaths under 1 week per 1,000 total live births)	10.1
Perinatal mortality rate (stillbirths and deaths under 1 week combined per 1,000 total live and stillbirths)	18.6
Maternal mortality (including abortion)	
Number of deaths	1
Rate per 1,000 total live and stillbirths	0.1

1. Population

The natural increase in population for Gloucestershire (which is measured by the excess of births over deaths) is shown graphically in Fig. I for the years 1942 - 1972. The figure clearly demonstrates the low birth rates experienced in the late 1940's and early 1950's which on a national scale caused anxiety about under-population, and the rising rates in the 1960's which caused anxiety about the reverse trend. It can be seen that the difference between births and deaths has again diminished and settled down to a steadier level. The estimates of the population at mid year made by the Registrar General and quoted here for selected years show that the changes in the number of residents in the County from year to year are due more to migration than to natural increase. At no time in the past thirty years has the natural increase exceeded 5,260 but the actual increase regularly exceeds this number.

FIG. I

Excess of births over deaths in Gloucestershire, 1942 - 1972



2. Live Birth Rate

The Birth Rate for the year 1972 was 15.0 per 1,000 of the population, compared with 16.2 in 1971. The following table shows the comparative figures for the past five years :—

	1968	1969	1970	1971	1972
Urban	16.8	15.6	15.0	15.5	14.0
Rural	17.7	17.4	16.5	16.5	15.5
Administrative County ...	17.4	16.8	16.0	16.2	15.0
England and Wales	16.9	16.3	16.0	16.0	14.8

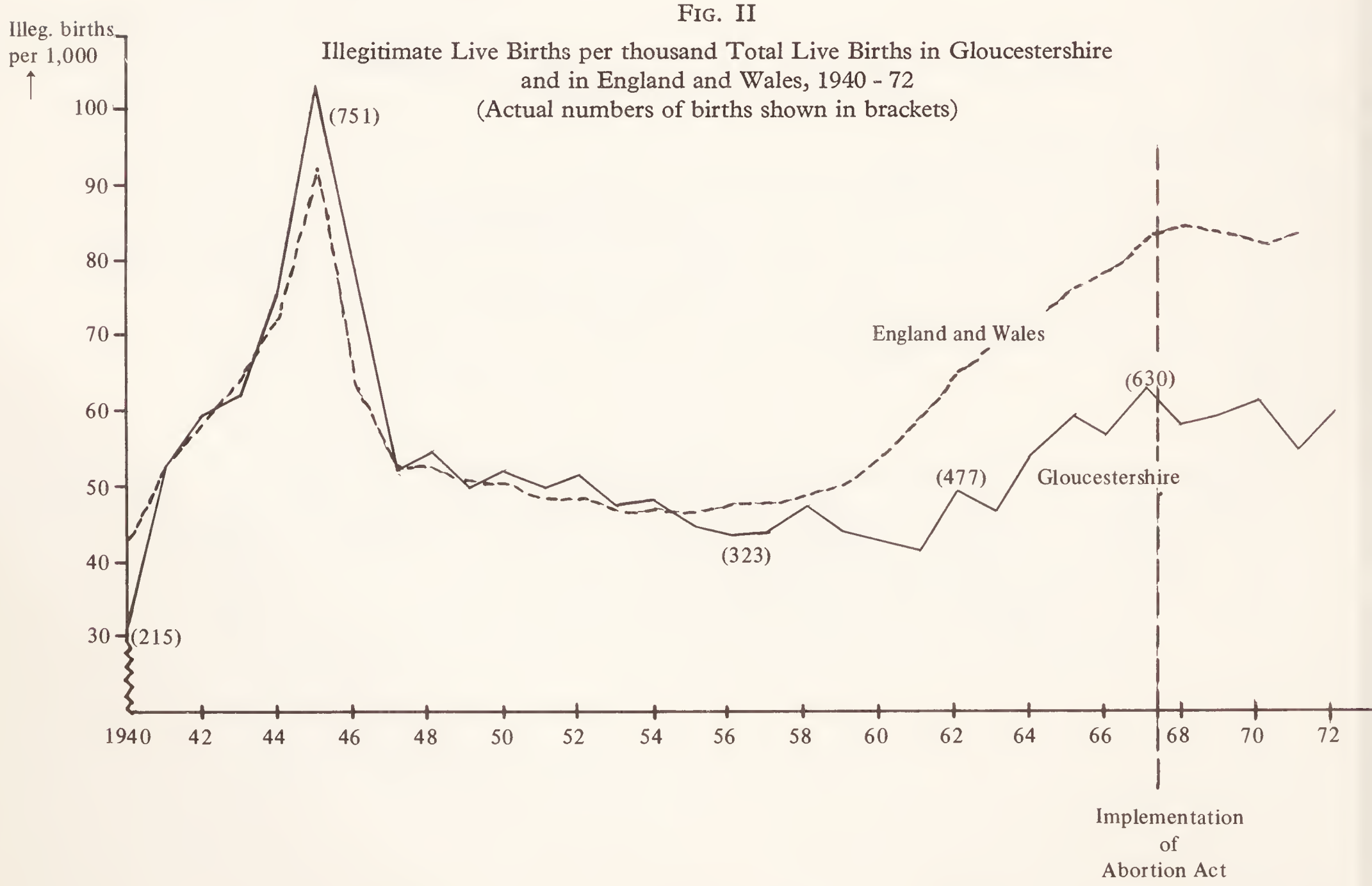
After adjustment by the Area Comparability Factor (1.00) the Live Birth Rate (15.0) still exceeds that for England and Wales.

3. Illegitimate Births

The customary expression of illegitimate live births as a proportion of total live births gives an approximate quantitative index of illegitimacy. Fig. II shows the rates for Gloucestershire and for England and Wales for the period 1940 - 1972. It is striking to note how closely the County figures followed the national figures until 1958 and then commenced a divergence which has continued since. It is tempting to relate this to moral attitudes and the impact of the schools scheme for education for personal relationships, but the connection, if it exists, is a remote one. Examination of comparable figures for surrounding authorities reveals that conurbations are experiencing trends which parallel the national figures and that counties with a mainly rural population have figures similar to our own.

FIG. II

Illegitimate Live Births per thousand Total Live Births in Gloucestershire and in England and Wales, 1940 - 72
(Actual numbers of births shown in brackets)



4. Deaths

The Death Rate for the year was 10.5 per 1,000 of population, compared with 10.3 in the previous year. After adjustment by the Area Comparability Factor (1.03) the Death Rate (10.8) compares favourably with the rate for England and Wales (12.1).

The total number of deaths in the County during 1972 was 6,006 and the chief causes are shown in the following table.

Cause	Total Deaths	Rate per 1,000 population	Percentage of Total Deaths
Heart and Circulatory Diseases	2,381	4.2	39.6
Cancer	1,202	2.1	20.0
Cerebrovascular Disease	800	1.4	13.3
Respiratory Diseases	772	1.4	12.9
Motor Vehicle Accidents	82	0.1	1.4
Other Accidents	81	0.1	1.3
Total	5,318	9.3	88.5

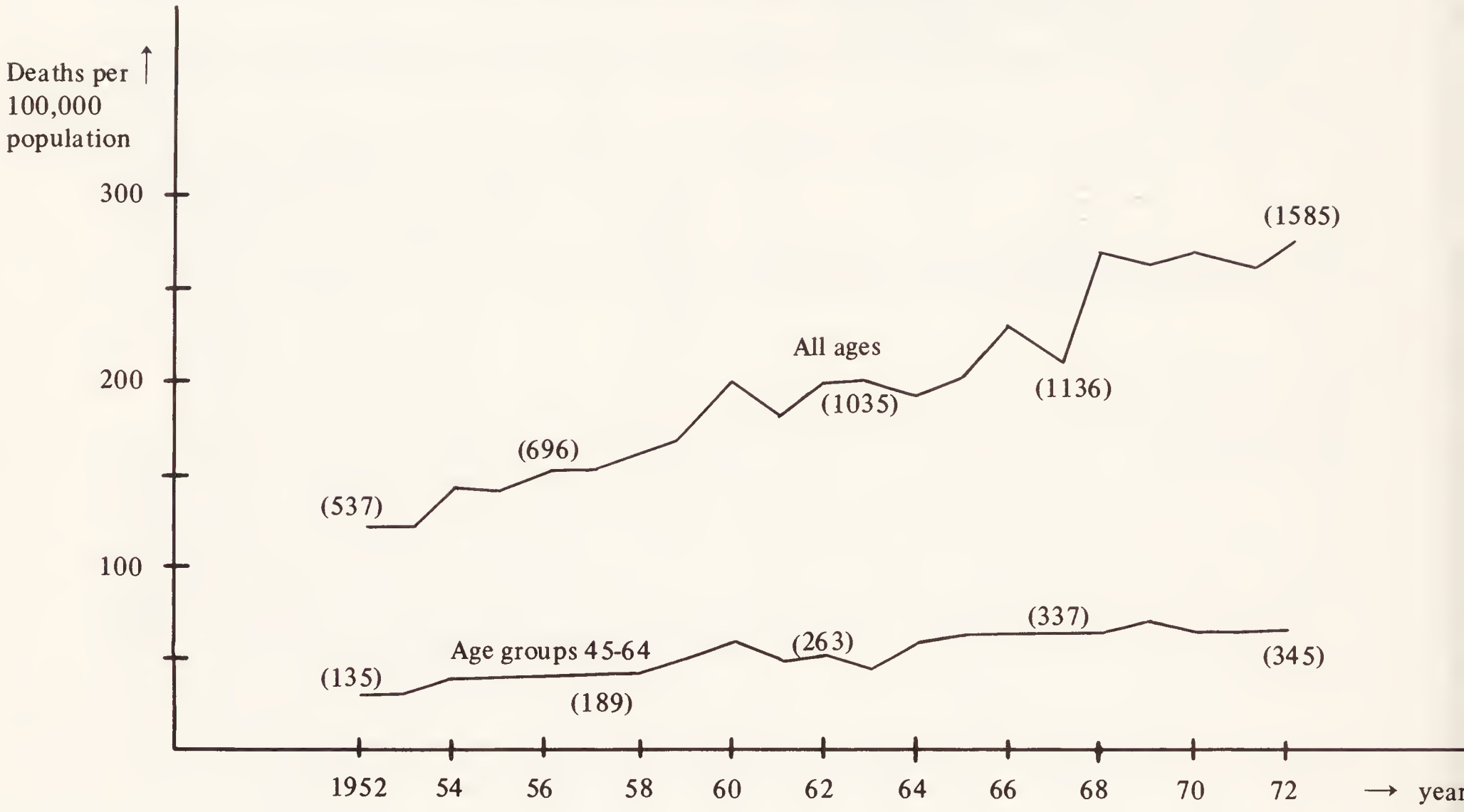
Ischaemic heart disease and cancer between them account for over one-half of the deaths. Among the cancers, cancer of the lung is the most frequently occurring cause of death. Just over five-sixths of those dying of this condition are men, but the numbers of women dying from cancer of the lung have increased over the past ten years. This sex differential in the epidemic of lung cancer which is taking place may in part be due to the fact that women commenced smoking heavily about a quarter of a century later than men. The disease is uncommon in non-smokers and is likely to become even rarer as the atmosphere is progressively cleared of the pollutants from burning coal. Notable examples are the Smoke Control Orders in urban areas and the electrification of British Rail. The personal pollution by cigarette smoke, however, still proceeds apace but it is significant that, alone among the professions, cigarette consumption by doctors has dramatically declined in the last decade. The incidence of lung cancer, even in heavy smokers, falls progressively with every year that passes after relinquishing the habit. We are thus dealing with a disease which is eminently preventable and a comparison with the number of deaths from other common diseases emphasises the importance of reducing the number of cigarette smokers.

Cancer of the breast is one of the commonest causes of death from cancer among women, being about twice as common as cancer of the uterus, and four times as common as carcinoma of the cervix alone. This underlines the importance of ensuring that procedures for the early detection of breast cancer should be carried out at the same time as screening for cervical cancer.

Ischaemic heart disease (including coronary thrombosis) continues to be the largest single cause of death among men and women. Fig. III shows the increase on death rates and actual numbers of deaths from this condition during the past twenty years. While ischaemic heart disease is a major preventible cause of death in the 45 - 64 age group, the larger actual increases in deaths have occurred in the over 65's. What the graphs do not reveal is the total number of persons experiencing a coronary thrombosis with subsequent recovery. It is possible that if figures were available they would reveal that many who would have succumbed to a first attack twenty years ago are now, due to improved resuscitation techniques, surviving without further incident or succumbing to later attacks. The increased mortality rate from the condition, together with the vast amount of sickness, time away from work and family disruption associated with non-lethal attacks, are sufficient justification for adopting vigorous measures to inform the public about the relationship known to exist between ischaemic heart disease and smoking, obesity, diet and exercise.

FIG. III

Deaths from Ischaemic Heart Disease, Gloucestershire, 1952 - 72
(actual numbers of deaths shown in brackets)



5. Deaths of Infants

(a) INFANTILE MORTALITY

The Infant Mortality Rate for the County was 17.2, the same rate as for England and Wales.

Year	Urban		Rural		Whole County		Rate for England and Wales
	No.	Rate	No.	Rate	No.	Rate	
1963	60	18.5	122	18.0	182	18.2	21.1
1964	55	16.5	121	18.2	176	17.0	19.9
1965	50	14.7	127	17.3	177	16.5	19.0
1966	52	15.6	116	16.0	168	15.9	19.0
1967	44	13.7	110	16.2	154	15.4	18.3
1968	50	16.2	90	13.7	140	14.5	18.3
1969	54	18.8	95	14.5	149	15.9	18.0
1970	42	15.2	96	15.3	138	15.3	18.2
1971	47	16.5	80	12.9	127	14.0	18.0
1972	47	18.1	101	16.9	148	17.2	17.2

(b) Trends

Graphic presentation (Fig. IV) of the stillbirth, peri-natal mortality and infant mortality rates for the County since 1942, shows a marked fall during this period. (Peri-natal mortality rates were not recorded before 1960). These trends parallel the national experience and are a vivid reminder of the improvements in obstetric and child care which have taken place during the past thirty years. Preliminary investigation of the current increase in the infant mortality rate reveals that the major increase in the number of deaths has occurred in the early neo-natal period and is particularly related to premature infants.

Fig. IV

Trends in mortality rates relating to children

SECTION B

GENERAL PROVISION OF HEALTH SERVICES FOR THE COUNTY

1. Laboratory Facilities

(a) Public Health Laboratory Service

The excellent relationship which has always existed with Dr. A. E. Wright at the Public Health Laboratory, Gloucester, has been maintained. We are also very indebted to Dr. H. R. Cayton, of the Bristol Public Health Laboratory, for his help in the Southern parts of the County. Arrangements were

made to assist Dr. R. E. Hope-Simpson at the Public Health Virus Laboratory at Cirencester, by arranging for a health visitor to be available to him for collection of epidemiological specimens in connection with any influenza outbreak.

(b) Public Analyst

The sessions of E. G. Whittle, Esq., B.Sc., F.R.I.C., were available to the Council as Public Analyst. His help during the year has been much appreciated.

2. Health Centres

Hesters Way, Cheltenham

The Centre continued to provide medical and health services to the neighbourhood.

Kingswood

This Centre opened in November. It had had a protracted planning period chiefly because it was the first time a full Health Centre had been combined with Area Offices for the Health and Social Service Departments. The move into the building went smoothly and the long planning period appears to be justified.

Thornbury

Again, this Centre has made steady progress. It is pleasing to note that a consultant geriatrician has started a monthly session in addition to that of the Consultant Psychiatrist. Another general practitioner joined the Centre and it was possible to place a contract for a new playroom which will make availabe the old playroom for interviews/consultations. Despite careful programming it is becoming difficult to find room for the increasing range and frequency of Clinics.

Yate

The population of Yate is rising rapidly and this was a year of great pressure on the staff and accommodation of this Centre. Inconsiderate parking by those using the shopping Centre caused increasing annoyance but inside the building there is a scene of continuous activity. Nine general practitioners practise from the Centre and all the local authority clinics operate from here ; some, such as chiropody, for three full days each week. In addition, the Regional Hospital Board has arranged a monthly consultant psychiatric clinic.

Further building is programmed to cater for the rising population but the existing Centre will be very heavily pressed to cope with the work load until the new buildings are ready.

Stroud

The building of this new Centre began during this year and is scheduled to be completed by October, 1973. It will be the biggest Centre in the County having 12 general practitioner suites, a local authority suite and a Child Guidance Unit and Area Offices as for Kingswood.

3. Care of Mothers

(a) Expectant and Nursing Mothers

Ante-natal care was received by 3,309 mothers. One domiciliary midwife held 47 ante-natal sessions in her own premises, and 118 general practitioners held sessions in their surgeries.

Mothercraft and relaxation clinics were held at 32 centres. The numbers attending were :—

Booked for hospital delivery	2,009
Booked for home confinement	33
Total attendances	8,957

(b) Arrangements for Confinement

The birth rate shows a marked decrease this year over the previous year and this continues the trend which commenced in 1966. Births for the past five years are shown below :—

	Total Births	Live Birth Rate
1968	9,743	17.4
1969	9,505	16.8
1970	9,132	16.0
1971	9,210	16.2
1972	8,617	15.0

The number of deliveries taking place at home has again decreased, and beds are available in consultant and general practitioner units for those who require them. Many patients return home approximately 48 hours after delivery, the domiciliary midwife accepting full responsibility for them under the direction of the general practitioner. The system depends on the adequate planning of early discharge, and enquiries are made into the suitability of arrangements in all cases.

(c) Cervical Cytology

After a difficult beginning the 5 year re-call for smears from the Central Register is now in operation. The arrangements are proceeding satisfactorily, except that the Register is still not being up-dated when women over the age of 35 are having smears taken before the 5 year limit as occurs when they attend Family Planning Clinics. This omission gives rise to anxiety in many patients when they are recalled sooner than they expect.

A copy of all smears taken in the area now comes to the Health Department and smears reported as Grade III, IV and V, are checked personally with general practitioners, who appreciate the interest.

	Number of Smears Taken	
Social Classes	1971	1972
I and II	914	781
III	1,564	1,476
IV and V	827	709

Staywell Clinic

The Gloucester City and County Appeal for Prevention of Cervical Cancer has had a difficult year with several problems. However, the close liaison between us has continued. Our medical officers are allocated sessions to them which saves the Staywell from paying doctors' fees for these sessions.

With the 5 year re-call system now in full operation, we have relied on the Staywell to cover the extra demand in some areas and their continued visits to factories is an excellent service.

A total of 1,058 patients was screened during the year.

(d) Family Planning

In the past the Family Planning Association acted as our sole agent in supplying contraceptive help to our medical and social cases, but it became increasingly evident that our real cases in need were unlikely to make the effort to attend these clinics for a variety of reasons, not least being the distances to travel.

Two lines of action were therefore decided upon—first to make family planning advice more readily and easily available and secondly to have intensive training for our health visitors.

To tackle the first problem the Health Committee agreed to our suggestion that we should pay general practitioners with special family planning training and experience, the same amount as we pay the Family Planning Association to look after our medical and social cases. The general practitioners responded well and we now have an accepted 61 into our scheme.

The second action was to get training for our health visitors, district nurses and midwives and as we were about to organise this, the Department of Health and Social Security agreed to sponsor such training through the Family Planning Association and we were fortunate in having the very first course offered to nurses. This 2 day course covered all aspects of family planning and gave ample time for discussion. We have now had 3 of these courses and have dates booked for a further 2 so with a number of our nurses already Family Planning Association trained, our nursing staff is well informed and well motivated. The benefit of this training has shown in the vastly increased number of referrals for free service and the obvious influence of the health visitor, district nurse and midwife.

There are many areas in the County where it would be uneconomical for Family Planning Associations to open clinics, but where nevertheless there is a need for a clinic. Many women go to their own general practitioner for contraceptive advice and treatment, but many prefer the anonymity of a clinic doctor. We therefore opened local authority family planning clinics in 3 rural areas towards the end of the year and have plans for 3 more to open early in 1973.

It is felt that family planning is an integral part of family doctoring and the local authority has no wish to take patients away from their general practitioners, but a woman is entitled to a free choice. We are very concerned to keep the general practitioner informed of every visit made by his patient and of the treatment given.

During the year we held a 2 day course on family planning for those general practitioners who felt they needed this—22 practitioners attended and all gave favourable reports and wished for further study days. It is proposed to have a study day in the Spring of 1973 to which the general practitioners will be invited.

With the passing of the Vasectomy Act steps were immediately taken to establish a service. This is still in the planning stages but, with the agreement of the appropriate hospital management committees, we hope to make arrangements with peripheral hospitals throughout Gloucestershire where specially trained doctors can perform the operations. It will also be necessary to arrange for the pathological examination of specimens of each vasectomy and post operative sperm counts. The Secretary of State has specifically said that pre-operative counselling should be thorough and should last for at least 30 minutes. We would hope that experienced general practitioners would counsel before referring patients to us, but if they feel unable to do so we will arrange this through our specially trained medical officers.

Our vasectomy service will be for social and medical cases only and the authority will pay for the operation.

Domiciliary Service

Even with the general practitioner service, F.P.A. and local authority clinics, and the offer of " baby-sitters " and transport, there remains a nucleus of women who need help but who still fail to come forward for advice and treatment. We, therefore, established a domiciliary service whereby a family planning trained doctor and nurse visit the patient in her home to discuss, prescribe, treat and follow up. It is of interest to note that of the cases so dealt with, all have ultimately attended static clinics with support in various ways. The domiciliary service covers the whole county.

4. Care of Children

(a) Observation Register

The revision of the Observation Register by reducing the categories of pre and peri-natal factors has brought the total numbers to more realistic levels. Reliance is even more heavily placed on the health visitor to identify the children who are likely to need help in the future, and this modification has worked well during 1972.

The Register assists greatly in forward planning not only from the educational viewpoint but also in budgeting for special help such as physiotherapy and speech therapy needs. It has been used with great advantage in making provision for the pre-school handicapped child.

Through the Register there is liaison with the Social Services Department, who are able by this means to prepare for help where needed.

(b) Congenital Abnormalities

It is probable that many abnormalities are not recorded because they are considered by the examining doctor or nurse to be too minor. There would seem to be two reasons, however, why even minor departure from normality should be recorded. First, in the country as a whole, a rise or fall in a particular type of abnormality may have epidemiological significance. Secondly, the defect may not be regarded as trivial by the parents, and in hospital planning it is important to know how much consultant and hospital time is taken up in advising and treating.

(c) Child Health Clinics

The valuable work carried out in these clinics has continued during 1972, and I am indebted to all the voluntary workers who give up their time so willingly. During the year regular sessions were held at 108 static child health clinics, and clinics were also held in six general practitioner premises throughout the County. New clinics were opened at Alveston and Pilning. The mobile clinic formerly visited these areas but the demand was such that it was necessary to open static clinics and these are now thriving. Due to shifting population it was necessary to close the clinic at Great Barrington.

The numbers of children who attended clinics were :—

Born in 1972	5,231
1971	6,102
1967 - 70	10,807
Total	22,140

Mobile Child Health Clinic

This bus-type vehicle is a familiar sight in the County and is much appreciated by the mothers in remote rural areas. Due to the limited financial resources it was not possible to replace the mobile clinic damaged in 1971, but the present vehicle regularly visited 63 villages during 1972. Because of rising costs, a complete reappraisal of the mobile clinic programme will be attempted in 1973. In some areas, it may prove more economical to transport the mothers and children to a fixed clinic. The interior design of the clinic is such that it can also be used as a cytology clinic and a family planning clinic.

(d) Mothers' Clubs

Regular meetings were held by 17 mothers' clubs during the year. These clubs have a mixed programme of social and educational events, at least half of the sessions being devoted to some aspect of health education.

(e) Distribution of Welfare Foods

Welfare Foods were available at 179 child health clinics (fixed and mobile), 11 shops, the W.R.V.S. at Kingswood and 8 part-time offices, the latter involving paid assistance.

Distribution was :—

National Dried Milk (tins)	7,886	(8,061)
Cod liver oil (bottles)	305	(3,909)
Orange juice (bottles)	44,529	(151,482)
A & D tablets (packets)	719	(6,469)
Children's vitamin drops (bottles) ...	26,230	(12,121)
A, D & C tablets (containers)	4,209	—

The 1971 figures are shown in brackets.

A, D & C tablets were introduced in June, 1972, and these are taking the place of orange juice and A & D tablets. Cod liver oil has ceased to be supplied as part of the Welfare Food Service.

5. Infant Deaths

(a) Neo-Natal Deaths

There were 103 deaths notified during the first 28 days of life, 85 of these occuring during the first seven days. The primary causes of death were as follows.:—

	0 - 6 days	7 - 28 days
Prematurity—		
where given as a sole cause	20	1
associated with respiratory distress ...	27	—
associated with other conditions	5	1
Congenital defects	16	*10
Respiratory distress and atelectasis	5	—
Cerebral haemorrhage	2	1
Haemolytic disease	2	—
Asphyxia	3	1
Other	5	4
Total	85	18

*Seven of the congenital defects were abnormalities of the central nervous system.

(b) Infant Deaths

The deaths of 44 infants between the ages of one month and one year were recorded, as follows :—

Respiratory infections	9
Asphyxia	5
Cardiac conditions	3
Cerebral haemorrhage	1
Congenital defects	5
Cot deaths	15
Other	6
Total	44

Cot deaths have appeared in the analysis for the first time this year, due to the fact that the term was used more frequently as a specific syndrome during 1972. The syndrome refers to the unexpected discovery of a child dead in bed with no previous recognisable illness and no convincing detectable cause of death. It is a condition which is receiving considerable attention throughout the country in an effort to determine causative factors.

(c) Premature Babies

There were 575 babies of birth weight 5 lbs. 8 ozs. and less during 1972. The figures below give details, those for 1971 are shown in brackets.

	Live	Stillborn	Total
Born in hospital	513 (490)	54 (50)	567 (540)
Born at home	7 (28)	1 (1)	8 (29)
	520 (518)	55 (51)	575 (569)

Died within 24 hours	48 (36)
Died in 1 and under 7 days	18 (14)
Died in 7 and under 28 days	7 (4)
Total	73 (54)

Of the 73 deaths, 68 were of babies weighing 3 lbs. 4 ozs. or less at birth. Careful selection of obstetric care ensures that the majority of premature babies are delivered in hospital. Specialist care is provided for premature babies after discharge from hospital.

(d) Illegitimate Infant Deaths

Of the 376 illegitimate births notified 2 were stillborn : 14 illegitimate children died under the age of one year. The illegitimate infant mortality rate was 27·8 per 1,000 live births compared with 16·6 per 1,000 for the legitimate infant deaths.

(e) Stillbirths

Of the 74 stillbirths notified, only two took place at home. The stillbirth rate per 1,000 total births for the past four years has been as follows :—

1969	11·1
1970	10·6
1971	9·6
1972	8·5

6. Nursing Services

Miss Allison, Area Nursing Officer, Forest Area, resigned in July, 1972 after 28 years of loyal service to the County Council. Mrs. Meredith transferred from the Southern part of the County and replaced Miss Allison in the Forest area. Miss Twemlow, Nursing Officer, Cheltenham Borough, was appointed to the vacancy in the South and took up her appointment on 1st November, 1972.

	Whole-time	Part-time	Whole-time Equivalents	Vacancies
County Staff				
Director of Nursing Services ...	1	—	1	—
Divisional Nursing Officer ...	1	—	1	—
Area Nursing Officers	5	—	5	—
Nursing and Midwifery	150	74	218	4·5
Health Visitors	83	18	93·15	6
Health Visitor Assistants	—	19	9·05	1
Nursing Auxiliaries	—	11	5·05	1
Cheltenham				
Area Nursing Officer	1	—	1	—
Assistant Superintendent ...	1	—	1	—
Nursing and Midwifery	26	4	28	—
Bath Attendants	—	3	1·5	—
Health Visitors	14	2	15	—

Liaison has taken place at Regional and County level with Directors of Nursing Services and Chief Nursing Officers from the hospitals. Nursing Officers in the majority of hospitals in the County have been visited and discussions concerning further increased movement of staff between hospital and community have taken place. In areas where this has been feasible, action has been taken.

Training

District Nursing

The national district nurse training continues to be carried out by the City of Gloucester and the County in a combined effort.

Midwifery

The County staff participate in the training and thirty-seven student midwives completed Part II Midwifery.

Domiciliary Midwifery

The domiciliary midwifery services in the administrative County are provided directly by the County Council.

The number of domiciliary confinements continues to decrease. The number of women, however, being discharged from hospital before the tenth day requiring the services of a domiciliary midwife, rose appreciably and 4,560 early discharges took place in 1972 as compared with 4,071 in 1971 and 3,831 in 1970 as shown in the following table.

Totals	1970	1971	1972
Domiciliary births	956	585	377
Early discharges from hospital ...	3,831	4,071	4,560
Births conducted in hospital by domiciliary midwives	956	366	479

(Multiple births are only reckoned here as one delivery)

Ante-natal supervision is provided by general practitioners and midwives at health centres, ante-natal clinics, surgeries and infant welfare clinics. In addition, ante-natal visits are carried out on the expectant mothers in their homes. Midwives attached to general practice complement the general practitioners work extremely well.

Total number of midwives attached to general practices ...	61
Total number of doctors involved	134

Notification of Intention to Practice

It is the duty of every midwife, who wishes to practice in the area of a local supervising authority, to notify that authority each year of her intention to do so. 228 Midwives notified their intention to practice in 1972.

County Schemes

Attachment of nursing staff to general practitioners :—

district nurses	187
district nurse midwives	
district nurse midwife/health visitors	
health visitors	87

Number of general practitioners involved in attachment schemes ... 191

Attachment of staff to general practitioners is encouraged and cross boundary visiting is being extended gradually.

Geriatric Services

A bi-monthly consultant geriatric assessment clinic is operative in the Thornbury Health Centre. A health visitor and district nurse assist. The old people obtain social and medical help in an endeavour to keep them in their own homes as long as possible.

In Downend a geriatric screening clinic commenced in January and is getting underway slowly. This is held from a general practitioner's surgery and a health visitor and district nurse assist in the diagnostic procedures. Formal case conferences continue at Manor Park Hospital, when the Area Nursing Officer, Area Director of Social Services, nursing and health visiting staff, meet with the hospital staff and discuss admissions and discharges of patients.

Informal liaison connected with care of the aged is evident throughout the County.

Paediatrics

A Health Visitor attends (and has a base) at the Paediatric Clinic, Southmead Hospital. She assists in the research into possible duplication of services within the County at the request of the Paediatrician.

Health Visitors visit the babies in children's wards in Southmead Hospital regularly with a view to continuity of care, when the children are discharged home.

Premature Baby Liaison

A specialised Health Visitor continues to provide domiciliary premature baby care in the South of the County.

A Health Visitor is involved with paediatric work in the Gloucestershire Royal Hospital. She acts as liaison officer between the appropriate health visitor and the consultant paediatrician.

Marie Curie Service

This service commenced in a limited way where recruitment was possible. Although the scheme is essentially intended for caring for patients in their own homes suffering from cancer, the appointed staff are used for general night nursing care, where the need for the Marie Curie Service is not required. This is done, in order to retain the staff, since the work for cancer patients is sporadic. The County Council meets the financial costs for the general care patient, whereas the Marie Curie Foundation finance the cost of caring for the patient suffering from cancer. This service which provides state registered nurses, state enrolled nurses and auxiliaries, according to the degree of treatment, will be extended as resources permit.

New Liaison Schemes

Radiotheraphy Unit, Bristol

The Health Visitor works between hospital and home in support of the patient and family.

Glenside Hospital, Bristol

A formal liaison exists between the community and hospital. The health visitor concerned visits patients and discusses problems advising her appropriate colleagues of the patient's needs. She also advises the hospital team on the patient's home conditions and of any problems which may be evident.

Mothers' Classes in Yate Health Centre

These classes are held bi-monthly for selected mothers registered with one medical general practice. Topics include infant nutrition, dental care, safety and accident prevention, toys and play for under 5 year olds, and early child development. Family planning and a talk from a social worker have also been included.

Well Baby Clinics

A well baby clinic commenced in the general practitioners' surgery in the Kingswood Area.

Play Groups

Two play groups commenced in the Stroud area.

Mothercraft Classes

Three mothercraft classes commenced in Coleford, Charfield, and South Cerney, respectively.

Lead Levels in the Blood

The southern area of Gloucestershire cooperated with Bristol Health Department staff in the testing of lead levels in the blood of children of fathers employed by the Imperial Smelting Corporation plant at Avonmouth. Between 50 and 60 children in this area were involved, but no high lead levels were recorded.

Visitors to the County

Sir Philip Rogers, Permanent Under Secretary at the Department of Health and Social Security, visited Yate Health Centre during his visit to the health and social services in the area. Opportunity for staff to take part in a general discussion on health centres was afforded.

A student from the U.S.A. and one from Ceylon visited the County.

Miss Turner, Education Officer, Central Midwives Board carried out a statutory inspection of the midwifery services in the County.

Students for Experience

Students from the following disciplines were welcomed to the County for experience in the following :—

(1) Health Visiting
(2) Hospitals
(3) Child Care
(4) Midwifery

Courses and Conferences

It is important to keep all grades of staff up to date. This type of education is very active in the County and arrangements are made as necessary to meet the demands of the staff.

Incontinence Pads

Incontinence pads and plastic pants are provided for both ambulant patients and those confined to bed.

Number of pads for use in bed	187,000
Number of pads for use with pants ...	214,000
Total	401,000

The number of pads provided greatly exceeded that of the previous year (308,000). Two thousand, one hundred and fifty pairs of plastic pants were issued.

Medical Arrangements for Long-Stay Immigrants

Following notice from medical inspectors at ports new immigrants are visited as soon as possible after their arrival by health visitors, who in spite of some language difficulties have been able to give information about the health services and to encourage chest X-ray examinations, where appropriate.

The countries issuing the passports were as follows.:—

(a) *Commonwealth Countries*		(b) *Non-Commonwealth Countries*		*Total*
(i) Carribbean ...	1	(i) European	14	
(ii) India	10	(ii) Other	27	
(iii) Pakistan ...	2			
(iv) Other Asian ...	17			
(v) African	52			
(vi) Other	16			
	98		41	139

In 1971, 67 notices were received in respect of 43 immigrants from Commonwealth Countries and 24 others. The increase in 1972 was largely due to the arrival of families from Uganda.

Maternal Deaths

Investigations into two maternal deaths were carried out for the Confidential Enquiry.

Table 1—Health Visiting—Cases Seen by Health Visitors During Year

	Type of Case (If a householder rather than a person is visited, the case is included in line 6 ,7 or 8, and not in lines 1-5)			Total number of cases seen (1)	Number of cases included in col. (i) Type of Case request of :— Hospital (2)	GP (3)
1	Children born in 1972			9,312	91	365
2	Other children aged under 5			30,252	52	922
3	Persons aged between 5 and 16 seen as part of health visiting, (i.e. excluding those seen as part of school health service)			3,319	33	430
4	Persons aged between 17 and 64			4,666	255	1,271
5	Persons aged 65 and over			6,134	303	2,348
6	Households visited on account of tuberculosis			349	50	107
7	Households visited on account of other infectious disease			226	11	103
8	Households visited for any other reason			905	68	238
9	Total			55,163	863	5,784
	Number of persons included in lines 1-5 who are :—	10	Mentally handicapped	367	31	122
		11	Mentally ill	878	12	365

TABLE 2—HOME NURSING

	Place where first treatment during year by the home nurse took place	Number of persons treated during year aged			
		Under 5 (1)	5 - 64 (2)	65 and over (3)	Total (4)
10	Patient's home	522	5,112	11,874	17,508
11	Health Centres	344	3,213	260	3,817
12	GPs' premises (excluding those in health centres)	1,276	6,256	1,851	9,383
13	Maternity and child health centres	43	512	70	625
14	Hospital	—	2	—	2
15	Residential homes	1	68	525	594
16	Elsewhere	67	205	199	471
17	Total	2,253	15,368	14,779	32,400

TABLE 3—MIDWIFERY

		Discharged within		
	Number of cases delivered in hospitals and other institiutons but discharged and attended by domiciliary midwives	34	2 days	556
		35	3 - 7 days	2,894
		36	8 or more days	1,667
		37	Total	5,117
18	Number of domiciliary confinements attended by midwives under NHS arrangements			413
19	Number of hospital confinements conducted by domiciliary midwives			577

HEALTH VISITORS' TRAINING COURSE

All students entering this post-registration full time course are on the general register of nurses and training extends over a period of twelve months. Theoretical work throughout the academic year is undertaken at the North Gloucestershire College of Technology and students amalgamate with student teachers one day per week for shared teaching sessions in the Behavioural Sciences at St. Pauls College of Education.

One third of the academic year is devoted to practical training when students are placed in selected training areas in Gloucestershire, Worcestershire and Wiltshire.

The written examination is held at the end of the academic year, subsequently followed by a nine week period of continuous practical training which precedes the oral examination at the termination of the course.

Twentyfour students completed the twelve month course which terminated on the 6th September. The standard achieved in the final examination was exceptionally high, six students were awarded Distinction and eight obtained Credit standard in the College examination and all the students were awarded the Health Visitor's Certificate of the Council for Education and Training of Health Visitors.

Dr. Gatherer, Medical Officer of Health, Reading, was appointed as the external examiner for a triennial period. In his final assessment he commented that the school produced work of outstanding quality, the students achieved a remarkably high standard and those who had gained distinction level thoroughly deserved it.

Five students were subsequently appointed as full time health visitors in the county, one being appointed to work in Cheltenham, eighteen returned to work in other local authorities and one student sponsored by World Health Organisation returned to Cyprus.

Ten students selected under the County Scheme and thirteen sponsored by other Local Health Authorities, commenced the present course on the 11th September.

7. Registered Nursing Homes

At the end of the year there were twelve nursing homes registered in the County. These homes provide 191 beds for general cases.

8. Vaccination and Immunisation

VACCINATION OF PERSONS UNDER AGE 16 COMPLETED DURING 1972

TABLE 1—COMPLETED PRIMARY COURSES

Type of Vaccine or Dose	Year of Birth					Others under age 16	Total
	1972	1971	1970	1969	1965–1968		
1. Quadruple D.T.P.P. ...	—	1	—	—	1	—	2
2. Triple D.T.P.	243	6,391	2,050	680	815	12	10,191
3. Diphtheria/Pertussis ...	—	1	1	—	—	—	2
4. Diphtheria/Tetanus ...	3	121	47	34	173	127	505
5. Diphtheria	—	—	—	—	1	2	3
6. Pertussis	—	—	1	—	—	—	1
7. Tetanus	—	—	—	—	7	337	344
8. Salk	—	—	2	—	1	—	3
9. Sabin	236	6,487	2,135	736	1,091	108	10,793
10. Measles	4	2,575	2,744	695	1,094	50	7,162
11. Lines 1+2+3+4+5 (Diphtheria)	246	6,514	2,098	714	990	141	10,703
12. Lines 1+2+3+6 (Whooping Cough) ...	243	6,393	2,052	680	816	12	10,196
13. Lines 1+2+4+7 (Tetanus)	246	6,513	2,097	714	996	476	11,042
14. Lines 1+8+9 (Polio) ...	236	6,488	2,137	736	1,093	108	10,798

TABLE 2—RUBELLA

1. Number of girls vaccinated between their 11th and 14th birthday	4,693

TABLE 3—REINFORCING DOSES

Type of Vaccine or Dose	Year of Birth					Others under age 16	Total
	1972	1971	1970	1969	1965–1968		
1. Quadruple D.T.P.P. ...	—	—	—	—	—	—	—
2. Triple D.T.P.	—	168	366	148	207	107	996
3. Diphtheria/Pertussis ...	—	—	—	—	—	—	—
4. Diphtheria/Tetanus ...	—	—	—	—	9,068	347	9,415
5. Diphtheria	—	—	—	—	7	1	8
6. Pertussis	—	—	—	—	—	—	—
7. Tetanus	—	—	—	—	116	3,085	3,201
8. Salk	—	—	—	—	—	—	—
9. Sabin	—	142	313	116	9,230	3,450	13,251
10. Lines 1+2+3+4+5 (Diphtheria)	—	168	366	148	9,282	454	10,418
11. Lines 1+2+3+6 (Whooping Cough) ...	—	168	366	148	207	107	996
12. Lines 1+2+4+7 (Tetanus)	—	168	366	148	9,391	3,539	13,612
13. Lines 1+8+9 (Polio) ...	—	142	313	116	9,230	3,450	13,251

TABLE 4—TUBERCULIN TESTS AND BCG VACCINATIONS

A. CONTACTS :

Skin Tested	460
Found Positive	73
Found Negative	238
Vaccinated	212
Babies vaccinated at birth	6

B. SCHOOL CHILDREN AND STUDENTS

Skin Tested	4,231
Found Positive	239
Found Negative	3,970
Vaccinated	3,970

9. Ambulance Service

(a) Cases Carried and Mileage in 1972 :—

Patients					Mileage				
(1) Ambs.	(2) Buses	(3) Cars	(4) H.C.S.	(5) Total	(1) Ambs.	(2) Buses	(3) Cars	(4) H.C.S.	(5) Total
89,051	102,754	72,358	65,603	329,766	833,376	357,418	502,296	835,050	2,528,140

The corresponding totals for 1971 were 314,363 patients and 2,381,027 miles.

During the latter half of the year the process of transferring Social Services cases from Ambulance Service transport to County Surveyor's or other transport was commenced. The Ambulance Service has been relieved of approximately 90 patient journeys daily and it is intended that all other Social Services cases not requiring specialised transport shall be similarly transferred in 1973.

The Hospital Car Service continues to give valuable assistance and conveyed 64,603 cases, 332 more than in 1971.

(b) Personnel

Staffing at the end of 1972, excluding H.Q. staff (6) was as follows :—

3 Superintendents	18 Sub Officers
14 Control Operators	135 Ambulancemen
5 Station Officers	3 Ambulancewomen

(c) Vehicles

Vehicle strength at the end of the year, including reserves :—

37 Ambulances	22 Sitting Case Vehicles
18 Bus-type Vehicles	4 Equipment Vehicles

(d) Training

Two induction courses for new entrants and two triennial refresher courses were held at Ullenwood.

Thirteen men successfully completed their six weeks course at the regional Training School.

One man was seconded to the Wrenbury School for Ambulance Instructors and was successful in obtaining his certificate.

A number of service members sat for the examinations of the Institute of Ambulance Officers ; two passes in the Graduate examination were obtained.

First Aid courses were provided at five centres for playing fields maintenance staff, and five full time courses for nursing staff were held at Ullenwood. Three courses in first aid were held at teachers' centres and instruction given at ten schools. Sixty one other talks were given to voluntary organisations.

The secondment of ambulancemen to hospital training began in January at Frenchay Hospital, this being followed by similar arrangements at Cheltenham General Hospital in March. During this year two men have completed periods of twelve months training at Frenchay, while twentynine men undertook the short term course of one month. The Cheltenham scheme is for three men at any one time for a period of six months and during the year six men completed this training.

During their training these men were available during their duty hours for emergency calls with the mobile resusictation units stationed at each hospital. These units are being operated for a trial period of two years in conjunction with the training schemes. The equipment carried by these vehicles includes

defibrillators, intubation kits, E.C.G., intravenous giving sets and selected drugs, piped oxygen and Entonox. At Frenchay Hospital the vehicle is accompanied by a doctor and a nurse, if requested by the Ambulance Control, while at Cheltenham a trained nurse is available who also acts as tutor to the trainees.

The purpose of the training schemes is to increase the knowledge and skills of the ambulancemen to use advanced equipment at the scene of emergencies, especially in resuscitation and monitoring of patients. The long term training is designed to qualify the ambulancemen to use all the equipment on the vehicle when required. Those men who satisfactorily complete their training receive a certificate authorising them to use the equipment for a period of six months, when they will return to the hospital for a refresher period and renew the certificate.

These arrangements are constantly under review and as a result the one year training period has been reduced to six months.

Discussions are being held with the Gloucestershire Royal Hospital, in conjunction with the Gloucester City Ambulance Service, regarding future hospital training which should begin in April 1973.

10. Prevention of Illness, Care and After-Care

(a) Chiropody

In my Report for 1971, I referred to the depressing state of this service with requests for treatment rising and recruitment of chiropodists falling. It became increasingly clear in the early months of 1972 that the decline in the quality of the service was likely to continue unless radical changes were made. A comprehensive report on the service was considered by the Health Committee in May, and the Committee set up a Working Party to study the report in detail and make recommendations. The Working Party's report was presented to the Health Committee in September and accepted without amendment. The full report is reproduced on page 37 and I refer here to only the more far-reaching recommendations. It was agreed radically to improve the working conditions of the chiropodists over the next three years by improving the facilities at the more frequently used clinics and closing down most of the clinics which were open only once per fortnight or per month. Because this change in policy would inevitably result in many patients having further to travel, it was agreed that transport should be provided or paid for in appropriate cases. It was important to explain to patients the reasons for this change in policy, and the Community Health Council through their Old Peoples' Welfare Committees have been particularly helpful in this respect. It was also agreed to recommend the appointment of Area Chiropodists and so provide a better career structure. This new policy has already led to measurable improvements in the service. During the last two months of the year there was, for the first time in many years, a full establishment of chiropodists. The interval between treatments, which had become four months and longer in some parts of the County, began to decrease even though the demands on the service continued to rise.

By the end of the year treatments for patients who had previously been attended to in rented halls were taking place in Moreton-in-Marsh, Cashes Green and Northleach hospitals. Negotiations were in hand in a number of other places to allow the chiropodist to work in the general practitioners' premises.

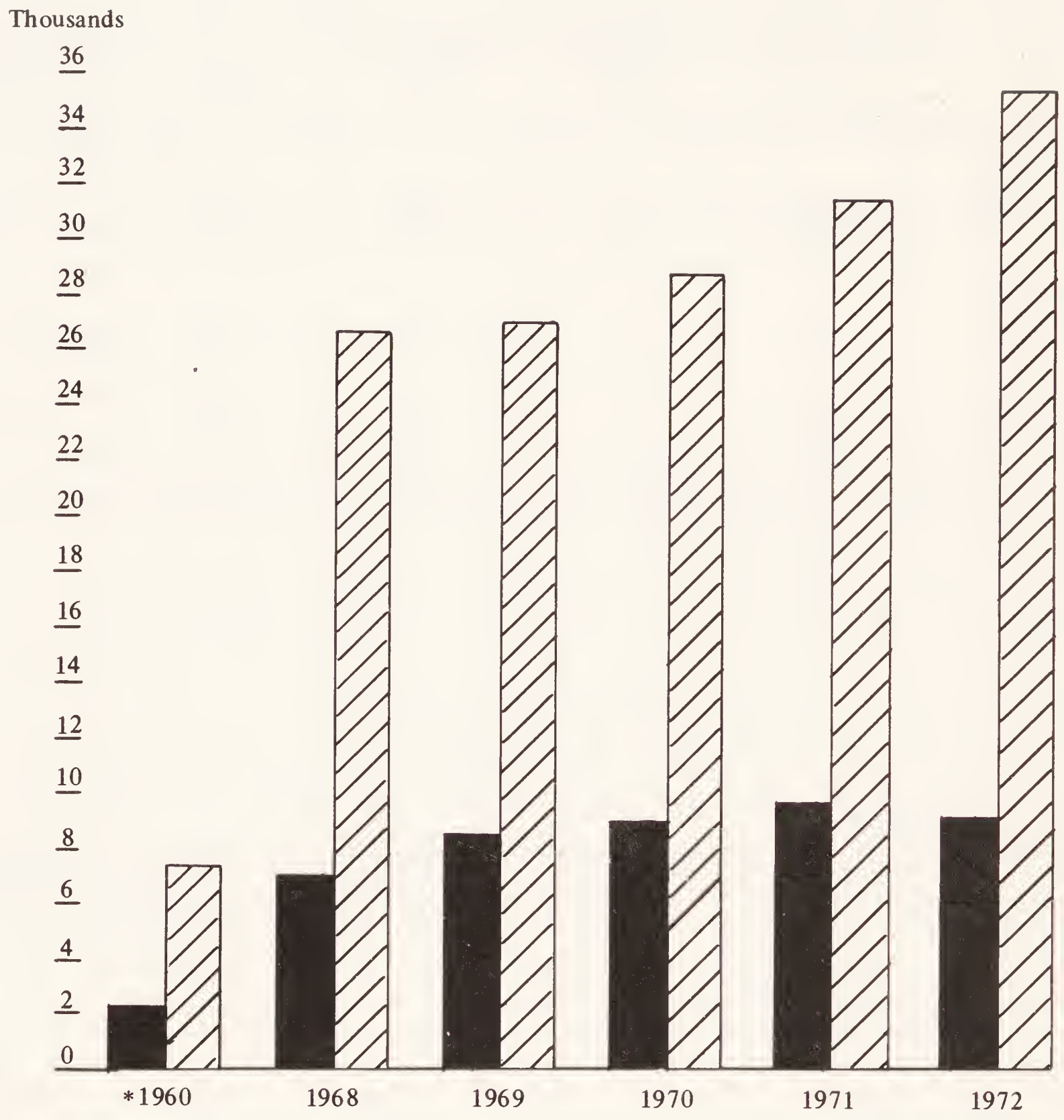
NUMBER OF PATIENTS ON REGISTER ON 31ST DECEMBER, 1972

	Women (60 & over) Men (65 and over)	Expectant Mothers	Handicapped Persons	Total	Percentage increase/ decrease
County Area					
1972	8,289	2	105	8,396	—0.7
1971	8,309	8	129	8,446	
Cheltenham					
M.B. 1972	974	—	18	992	+5.5
1971	929	—	11	940	
Totals 1972	9,263	2	123	9,388	0.0
1971	9,238	8	140	9,386	

NUMBER OF TREATMENTS DURING 1972

	At Clinics and Centres	Welfare Homes	In Patients' Homes	In Chiropodists' Surgeries	Total	Percentage Increase
County Area						
1972	25,803	4,587	2,412	—	32,802	12.9
1971	23,140	4,158	1,746	—	29,044	
Cheltenham						
M.B. 1972	1,385	97	226	1,049	2,757	15·7
1971	801	75	149	1,358	2,383	
Totals 1972	27,188	4,684	2,638	1,049	35,559	13.1
1971	23,941	4,233	1,895	1,358	31,427	

DEVELOPMENT OF THE CHIROPODY SERVICE



Number of patients on register

Number of treatments given

*1960 figures do not include Cheltenham Borough.

REPORT OF THE WORKING PARTY ON CHIROPODY

On 23rd May, 1972, the Health Committee considered a report of the County Medical Officer of Health on the Chiropody Service, and resolved to set up a Working Party consisting of the following members :—

Alderman the Hon. Mrs. H. W. Bathurst (Chairman)
Councillor J. Buckee (Vice-Chairman)
Alderman S. W. Hatton
Councillors Mrs. P. M. Bower, C. H. Jones, W. G. Lewton and R. Turner

The Working Party first met on 21st June, and gave detailed consideration to the recommendations set out in the County Medical Officer's comprehensive report on the Chiropody Service. Some of these recommendations were accepted ; others were amended, and still further recommendations were added.

The Working Party called for further information and met again on 7th July. On this occasion the Director of Social Services and the County Land Agent and Valuer were represented for part of the meeting to give advice on proposals which affected the respective Departments. Following this meeting. four of the Members had a working lunch with nine full-time and four part-time chiropodists in order to hear at first hand the views of those working in the service.

As a result of their discussions, the Working Party make the following recommendations to the Health Committee :—

1. That the policy should be to aim at fixed centres properly equipped and complying with the recommendations of the Society of Chiropodists, accepting that this will mean there will have to be fewer centres. Those centres which do not comply with the recommendations would be closed over a period of three years.
   It was appreciated that this recommendation is a radical one, but it was accepted as providing the best possible means of improving the conditions of work and so aiding recruitment. The recommendation is made only on the understanding that before any clinic is closed adequate transport arrangement will be made, especially in the more rural areas where public transport is limited and declining.
2. That no more centres should be opened unless the recommendations of the Society of Chiropodists can be complied with.
3. That mobiles should still be used for those places where there is no other means of providing satisfactory accommodation for treatment.
4. That those patients requiring home visits should have the same interval between treatments as patients attending clinics. This means, for example, that treatment should be every eight weeks except where the Chief Chiropodist recommends otherwise.
5. That some provision for improvements at the remaining large centres should be placed in the budget estimates, consisting probably of four projects of £2,500 each per year and £1,000 for furniture.
6. That a sum of £6,000 should be placed in the estimates next year to allow a rather greater flexibility in increased use of transport, including paying local people the actual cost of transport, including bus fares, where this appears more economic than arranging transport through the County Ambulance Service or the Hospital Car Service.
7. That there should be included in the estimates for 1973/4 a sum of £1,000 for equipment needed in an appliance workshop, and £800 - £1,000 for the annual cost of running the workshop.
8. That the balance of £2,700 from the current year's estimate for the provision of mobile units be used to purchase essential equipment for some of the larger clinics. A sum of £12,000 had been included in the estimate for three mobile units and it has been possible to obtain them for a total of £9,300.
9. That where acceptable to the Social Services Committee, arrangements should be made to build on or otherwise provide a chiropody surgery at homes for the elderly where this could be done without intruding on the privacy of the residents. It is envisaged that such a surgery could provide not only a better chiropody service for the residents but would also serve the old people in the surrounding area.

In considering this recommendation, the Working Party had the benefit of the advice of the Deputy Director of Social Services who drew attention to the following points :

(a) The residential home was, in fact, the elderly person's own home, with the consequent right to individual privacy.

(b) The proposal may lead to the staff of the home having to take on extra duties.

The Working Party appreciated both these points, and felt that this recommendation should only apply in very exceptional circumstances where it was impossible to make any other suitable arrangements.

10. That the Staff and Salaries Committee be recommended to agree to the appointment of three Area Chiropodists on an appropriate scale. It is envisaged that the present Deputy Chief Chiropodist could also assume responsibility for an area so that the service would, in effect, have four Area Chiropodists The number of Area Chiropodists may increase still further as the number of chiropodists increases. It is appreciated that the introduction of Area Chiropodists must result in the upward regrading of the Deputy Chief Chiropodist and the Chief Chiropodist.

11. That the policy of abating the minimum salary and sessional rate for the first three years after qualification, be abolished. This would mean that a newly qualified chiropodist would start on the minimum of the basic scale.

12. That the Staff and Salaries Committee be recommended to agree to the Authority sponsoring up to two trainee chiropodists per year.

August, 1972

HELEN W. BATHURST
Chairman

(b) HEALTH EDUCATION

" Health is a state of complete physical, mental and social well being and not merely the absence of disease and infirmity." The purpose of health education is to give people knowledge of and insight into matters which affect their health thus helping them to work towards this ideal.

There are many factors which have impact on the way in which a person thinks and feels and on what he does about his health. Giving information alone does not always result in action being taken, strong motivation being required to encourage an individual to change long established habits. The quality of the information and the method of presentation are vital factors in persuading people that a certain course of action is desirable. For this reason the topics of health education campaigns are selected with care after preliminary research to assess the need. Methods of evaluation of the effectiveness of these campaigns are being developed.

The Health Education Council annually chooses topics on which attention could be focussed nationally and it is convenient to work in parallel with the H.E.C. For 1972 the aspects of health selected were—

Family Planning
Venereal Diseases
Smoking

The following work was carried out in the County in connection with these subjects.

FAMILY PLANNING

The survey commenced in 1971 in order to assess the accessibility of the existing services and to determine the motivation of people seeking family planning advice was completed. The survey was conducted in two parts, an opinion questionnaire to be completed by health visitors concerning their own areas and a general questionnaire for completion by medical officers at family planning clinics, when interviewing each new patient during the survey period.

The questionnaire completed by 100 health visitors revealed the following :—

99 areas had access to family planning facilities.

66 areas had access to services at general practitioners' surgeries

9 areas had access to local authority mobile clinics

22 areas had transport difficulties associated with clinic attendance

50 health visitors felt there was a need for more services

29 health visitors considered that they needed extended training in the subject.

THE GENERAL SURVEY carried out among Patients by Doctors at Family Planning Clinics

Questionnaires were completed in respect of 113 new patients. Seventeen patients were straight transfers from one Family Planning Association Clinic to another. Of the remaining 96, 40 had had previous medical family planning advice and had attended as new patients for the following reasons :—

Advised by general practitioner	13	Clinic more convenient	1
Advised by health visitor	2	Needs free family planning advice	1
Advised by hospital	1	Just for a check-up	3
Wanted to change method	10	Dissatisfied with general practitioner	2
Wanted a safer method	4	Recent pregnancy	1
		Moved district	1

Only one person had read or heard anything recently that had influenced them to come now ; this was a poster or leaflet.

Of the 56 who had received no previous medical family planning advice, the following reasons for not seeking advice before were given :—

Using other methods	15	Lack of knowledge	1
Shyness	1	Wanted a pregnancy	2

Other 12—mainly " not married " or " no boyfriends "

To the question " what made you decide to come now " the following answers were given :—

General practitioner advised	2	Recent pregnancy	14
Friend advised	2	Regular boyfriend	9
Medical reasons	3	Getting married	8
Wanted a safer method	11	Needed contraceptive advice	4
No comment	3		

Eleven of the 56 had read or heard something which influenced them to come now.

Newspapers	1
Magazines	2
Posters or leaflets	2
Heard about F.P. Clinic from friend	6

THE LYDNEY SURVEY

Forty six questionnaires were completed.

Thirty three had had previous medical family planning advice, 22 from family planning clinics and 13 from general practitioners, but 17 were not using the method recommended for the following reasons :—

Using other methods	5	Don't like the method	2
Wanted a pregnancy	6	Husband objected	2
Recent pregnancy	1	Inconvenient clinic	2

Six participants mentioned the convenience of the new clinic.

To the question " What made you decide to come now ?" the following reasons were included—

Recommended by health visitor	12
Because of publicity	5
Family complete	4
Because clinic more convenient	14

The 13 participants who had no previous medical family planning advice, the following reasons for seeking advice now were given :—

Family complete	4
Recent pregnancy	4
Recommended by medical personnel	4
Husband's illness	1

Following this survey a campaign was carried out in three areas of the County—Tewkesbury, Wotton-under-Edge and Yate. These included displays and exhibitions in hospitals, factories, libraries, doctors' surgeries, clinics and shop windows and other sites available, supported by circulars to all local organisations offering speakers specialising in the subject.

During the year a total of 77 talks on family planning were given in colleges of further education and colleges of education, and to youth organisations and women's organisations.

Venereal Diseases

The Chief Medical Officer of the D.H.S.S. in his report for 1971 expressed concern for the great increase in the numbers of young people being treated for gonorrhoea throughout the country. In Gloucestershire there was an increase of 44 per cent over all age groups treated with an increasing proportion of young people under 20 years and a disproportionate increase in female cases.

Five exhibitions were mounted at the latter end of the year, giving information on the disease, showing the need for early treatment, giving detailed information how treatment can be obtained, and where and at what time clinics are held.

Talks have been given to a total of 38 audiences in senior schools, colleges of further education, colleges of education, H.M. Prisons and Home Office establishments by Health Department staff as specialist speakers. The E.P.R. teachers in senior schools have been supplied with films and other visual aids and information to help with discussions with the senior pupils.

Smoking

If cigarette smoking in Britain ceased, there would be a great reduction in conditions such as chronic bronchitis, coronary heart disease and lung cancer.

To persuade young people not to start smoking, information, discussions and talks with films were given in 186 junior schools to a total of 7,249 children. Films and other visual aids have been supplied to teachers in senior schools to help with discussions on this subject.

26 talks with film and discussion have been given in colleges of further education by Health Department staff.

An exhibition was mounted in November to continue throughout the following twelve months and to tour the County.

Other Talks Given Through Health Education Section

Schools	752	Exclusive of talks on smoking, VD and family planning
Colleges	43	
Youth clubs	101	
Adult organisations	228	
Parentcraft classes	1,749	
Films shown	552	
Other visual aids loaned	1,129	
New visual aids produced	44	

Displays

Displays on the subjects, Noise, Accident Prevention, Coronary Disease, Cervical Cytology, Food Hygiene, and Chiropody, were circulated between the seven large display sites within the County.

An exhibition on the " Care of the Feet " was mounted at the request of the Thornbury Horticultural Show Committee at the Thornbury Show in August for one half day. 573 people read the display or asked questions. This was broken down into :—

Men	176
Women	262
Children	135

This was about 1 in 7 of people attending the Show who stopped to look at the display.

A special display on Home Safety was arranged with Thornbury Home Safety Committee to coincide with their Christmas Home Safety programme.

A total of 72 displays were shown throughout the County.

Staff Training

Following the success of similar courses in previous years a three day training session entitled " Speaking with confidence " was held in November. Great use was made of the tutorial system on this occasion in order to enable students to obtain maximum benefit from the course. Observation of students at the course facilitates the selection of speakers to visit groups around the County.

Miss F. E. Fortnam retired in September, 1972, and Mrs. R. H. Rice was appointed in November with responsibility for both the County and the City.

(c) Home Nursing Requisites

The British Red Cross Society and the St. John Ambulance Brigade continue to act as the County Council's agents for the temporary loan of articles. The two organisations maintained 63 depots and the voluntary effort expended in administering these depots is a source of much satisfaction. Articles which are required for long periods or permanently are supplied through the Department.

(d) Renal Dialysis in the Home

The principal function of the kidneys is to purify the blood. Many people with diseased kindeys are able to enjoy an otherwise normal life if their blood is purified artificially by passing it through a kidney machine about three times per week. This treatment, which is called renal dialysis, must first be carried out in hospital, but in suitable cases it can be continued at home. As well as being more convenient for the patient, home dialysis frees a hospital bed and lowers ambulance transport costs. The kidney machine is loaned by the hospital but a specially adapted room must be provided in the patient's home. These adaptations are the responsibility of the local authority and the work is supervised by a member of the County Architect's staff and the appropriate Divisional Medical Officer.

By the end of the year twenty machines had been installed since the scheme commenced in February, 1970.

11. Computer

1972 was the first full year of operation of the computerised school health system, which started in August, 1971 with the arrangements for pre-school medical examinations of children born in 1967. The medical histories and computerised Forms 10M have been of value to the examining medical officers in providing on one sheet of paper both a summary of the child's key history to date and a form on which the findings at the examination could be recorded. The examination results were read into the computer by an optical mark reader and referral action automatically followed either by computer produced letters to the family doctor and subsequently to the hospital medical records officer, by lists for the various local authority clinics or by print out of turn-round audiogram forms for the audiometrician. In turn, these latter were read back to the records by the optical mark reader. In many ways, therefore, the necessary documents have been produced more accurately, speedily and with less clerical effort.

After six years of operation of the child health system, and seventeen months of use of the school health part, one can now more readily make an effective evaluation of what benefits the total system has brought. These may be summarised as :—

(a) Improved information more readily available to the local health authority professional and clerical staff, to general practitioners and to other local authority departments (e.g. Education, Planning).

(b) Improved preventive care, e.g. earlier detection of handicapped children.

(c) Improved immunisation records and better protection rates.

(d) Increased effectiveness of medical officers, health visitors, and other professional staff.

(e) Increased effectiveness and productivity of clerical staff.

(f) The ready provision of analyses and statistics to meet both regular and ad hoc requirements.

This year and next cover the period immediately prior to reorganisation of the health services. Whatever the outcome of deliberations now proceeding or still to be begun, one of the fundamental needs of the new health service will be information, both for better management of the service, for improved prevention of ill health and for better patient care. The computer has shown itself to be a competent tool in these fields and increased use of it must bring these benefits. Whilst no doubt there will be those crying for centralisation of everything, when one considers personal services, one is right in the heart of the district, or area. To have good local service requires good local resources and knowledge and the policy makers must have regard to the fact that it is in the areas and districts that computers have been used to good advantage. Collaboration between the new health authorities and the new local authorities is stressed in the management document for the health services ; what better start can be made than by counting to develop the use of those computers now in local authorities, along lines agreed regionally, and nationally. We should not attempt to duplicate this very expensive hardware, nor ignore the expertise developed over a long period which is likely to remain within the new local authorities.

SECTION C

DISEASES

1. General

Notifications of infectious diseases during the year are set out in Table II at the end of this report

2. Tuberculosis

Summary of formal notifications during the year :—

	Formal Notifications														
	Number of Primary Notifications of new cases of tuberculosis														
	0–	1–	2–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75–	Age un-known	Total
Respiratory, Men	—	—	—	1	1	—	4	1	3	6	3	4	1	1	25
Respiratory, Women	—	—	—	2	—	—	2	2	—	1	—	3	3	—	13
Non-Respiratory, Men	—	—	—	—	—	—	—	—	2	—	1	2	—	—	5
Non-Respiratory, Women	—	—	—	—	—	—	—	—	1	—	1	—	1	—	3

Persons removed from the register during year 1972 :—

Pulmonary	Non-Pulmonary	Total
204	56	260

Mass Radiography Service

The Organising Secretary of the Mass Radiography Service, South Western Regional Hospital Board, has provided the following figures for 1972 in respect of sessions held in Gloucestershire.

	Men	Women	Total
Total X-rayed	6,014	6,825	12,839
Abnormalities detected	138	75	213
No diagnosis yet received...	3	4	7
Abnormalities—Active Tuberculosis ...	6	1	7
Requiring Observation ...	—	—	—
Healed Tuberculosis	17	13	30
Non-tuberculous Cases ...	115	61	176

Bristol Chest Clinics—Social Work

Arrangements with the Bristol Corporation whereby Gloucestershire residents who attend the Bristol Chest Clinics and Hospitals are supervised by Bristol welfare officers, continued to work smoothly. Forty-nine patients were seen by the social workers. Only nine of the patients referred were suffering from tuberculosis.

REPORT OF F. J. D. KNIGHTS, ESQ., M.D., F.R.C.P., SENIOR CHEST PHYSICIAN, NORTH GLOUCESTERSHIRE CLINICAL AREA

In 1972 forty-eight new cases were notified in the North Gloucestershire Clinical area, excluding the City of Gloucester. They are analysed as follows :—

Abdominal Orthopaedic and Cervical glands	Primary or post primary infection	Minimal phthisis	Moderate phthisis	Advanced phthisis	Total
5	3	15	21	4	48

Twenty-five of the cases were referred by their general practitioner, 11 from other hospital departments, 2 were contacts, 9 were from other hospitals, and 1 was a relapsed case found on routine follow-up.

There were two immigrants, one from India, and one from Ireland.

Contact Examinations

Arising out of these notifications, 192 adult contacts were called for examination and 157 attended. 85 children were called, 76 attended of these 51 were B.C.G. vaccinated. Two were tuberculin positive, clinically well.

REPORT OF R. A. CRAIG, ESQ., B.Sc., M.D., F.R.C.P.
CONSULTANT CHEST PHYSICIAN, BRISTOL CLINICAL AREA

The accompanying table shows the sex and age distribution of new cases of pulmonary tuberculosis, subdivided into sputum negative and positive cases, occurring in South Gloucestershire residents and notified by Bristol Chest Clinic in 1972. The total number of notified new cases for 1972 was 7, compared to 12 for 1971 and 6 for 1970.

One case diagnosed in 1949 and never treated with chemotherapy was found to have a minor sputum positive relapse and returned to the register.

Two cases of pulmonary tuberculosis, both non-infectious, came to the area, one requiring continuation of treatment here. One case of glands of neck came to the area and continued treatment.

NEW CASES OF PULMONARY TUBERCULOSIS IN 1972

Age Group in years	Sputum Negative Cases			Sputum Positive Cases			All Cases		
	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes
0 - 14	—	—	—	—	—	—	—	—	—
15 - 44	—	—	—	2	1	3	2	1	3
45 - 64	—	—	—	3	—	3	3	—	3
65+	—	1	1	—	—	—	—	1	1
All Ages	—	1	1	5	1	6	5	2	7

3. Venereal Disease

REPORT BY A. E. TINKLER, M.A., M.D., D.P.H.
Consultant Venereologist, South Western Regional Hospital Board

In 1972 there was a very considerable increase in the number of county residents seen at the Venereal Disease Clinics held at Gloucester, Cheltenham and Bristol.

TABLE 1 New Cases : all conditions—Gloucestershire County Residents

Year	New Cases
1969	715
1970	969
1971	876
1972	1,041

SYPHILIS

This serious disease remains rare in the county. Three cases in the early infectious stages of the disease and four in the late non-infectious stages were seen in county residents during 1972. There were no cases of congenital syphilis.

GONORRHOEA

In spite of the very significant increase in the total number of patients referred to the clinics in 1972 and the national increase in the incidence of gonorrhoea there was an appreciable decrease in the number of county residents requiring treatment for this disease in 1972.

TABLE 2 — Incidence of Gonorrhoea

Year	Gloucestershire
1969	155
1971	275
1972	206

SECTION D

SANITARY CIRCUMSTANCES OF THE COUNTY

1. WATER SUPPLIES AND SEWERAGE

Twenty schemes of sewerage and sewage disposal and three water supply schemes were considered by the County Council during the year. The estimated cost of these schemes totalled £3,387,422 for sewerage schemes and £12,230 for water schemes.

In the financial year 1971/72, the County Council's contributions under the County scheme for financial assistance to district councils totalled £207,183, £43,691 for water supply schemes and £163,492 for schemes of sewerage and sewage disposal.

Details of the schemes considered by the County Council are set out below (estimated costs in brackets) :—

(A.) SEWERAGE AND SEWAGE DISPOSAL

CHELTENHAM RURAL DISTRICT

(i) *Alstone Sewerage Scheme* (£36,000)

To provide for 37 properties at Alstone and 6 at Bengrove. The scheme, strongly supported on public health grounds, was approved.

(ii) *Oxenton Sewerage Scheme* (£24,000)

A scheme to connect 34 existing properties to the Gotherington sewage disposal works was supported on public health grounds and approved.

CIRENCESTER RURAL DISTRICT

Quenington Sewerage Scheme (£134,500)

To provide main drainage to 146 properties, including a factory and a school, by a connection to the Fairford Sewerage scheme. The scheme included future provision for properties at Hatherop and Coln St. Aldwyn (in the Northleach Rural District). The scheme was supported on public health grounds and approved.

DURSLEY RURAL DISTRICT

Cam Woodend Lane Sewerage (£7,853)

To serve 10 houses and a Café, including the provision of a small sewage disposal works. The scheme was strongly supported on public health grounds and approved subject to technical comments on the design of the sewage disposal works.

EAST DEAN RURAL DISTRICT

(i) *Churcham Sewerage* (£32,000)

A resubmission of a scheme incorporating modifications recommended by the County Council in 1969. The scheme will serve some 42 houses and a school and includes a small sewage disposal works. The scheme was strongly supported on public health grounds and approved.

(ii) *Cinderford, Littledean Hill Road Sewerage* (£12,402)

A scheme, provided at the request of the North West Gloucestershire Water Board to protect their Buckshaft source, to serve 16 existing properties and a further 13 properties shortly to be constructed. Strongly supported on public health grounds, the scheme was approved.

(iii) *Ruardean Woodside, The Pludds, Brierley and Varnister sewerage and sewage disposal* (£246,000)

A scheme to provide main drainage to some 264 properties, including the provision of a sewage disposal works. The scheme was approved with the recommendation that the proposal for a new sewage disposal works be abandoned in favour of a connection to the Lydbrook sewage disposal works of the West Dean Rural District Council.

GLOUCESTER RURAL DISTRICT

Norton, Down Hatherley, Sandhurst and Twigworth Sewerage Scheme (£239,510)

To serve 282 existing properties with provision for some infilling and future development of 12 acres at Cold Elm. The scheme was strongly supported on public health grounds and was approved subject to a recommendation that the hamlet of Priors Norton should also be included.

NEWENT RURAL DISTRICT

Kempley Sewerage and Sewage Disposal (£108,400)

A scheme, to serve 74 existing properties in the village of Kempley and the nearby hamlet of Fishpool and to provide for limited future development, was approved.

NORTH COTSWOLD RURAL DISTRICT

(i) *Broadwell, Evenlode and Oddington Sewerage and Sewage Disposal* (£306,000)

A resubmission of a scheme submitted in 1965, now extended to serve also the village of Oddington. This scheme, which will serve 301 existing properties and provide for a further 61, was supported on public health grounds and approved.

(ii) *Great Rissington Sewerage and Sewage Disposal* (£64,100)

To provide for 100 existing properties and for an additional ten houses future development. The scheme was supported on public health grounds and approved subject to further discussions with the County Planning Officer who was not satisfied that sufficient allowance had been made for future development.

(iii) *Todenham Sewerage Scheme* (£56,873)

A scheme submitted at the request of the Department of the Environment in conjunction with a scheme to serve the villages of Bourton-on-the-Heath, Great and Little Wolford in the Shipston-on-Stour Rural District (Warwickshire). The scheme was approved subject to a recommendation from the County Surveyor.

NORTHLEACH RURAL DISTRICT

Eastleach and Southrop Sewerage Scheme (£220,000)

To provide main drainage to 177 existing properties with provision for future development of 48 properties. The scheme was supported on public health grounds and approved subject to technical comments.

SODBURY RURAL DISTRICT

(i) *Dodington Road, Chipping Sodbury Sewerage* (£4,590)

A small scheme to serve 10 existing properties was approved.

(ii) *Frome Valley Main Drainage—duplication of foul water sewer, Filton to Winterbourne* (£350,000)

A scheme to replace a grossly overloaded trunk sewer designed so as to permit regrading of two watercourses thus also permitting improvement to the surface water drainage of the area. Strongly supported on public health grounds, the scheme was approved subject to modifications recommended by the County Surveyor.

STROUD RURAL DISTRICT

Painswick Valley Sewerage (Stage II) (£800,000)

The second stage of the Painswick Valley scheme to extend the trunk sewer from Painswick to serve the areas of Cranham, Paradise, Sheepscombe, Pitchcombe and Edge, serving 561 existing properties with provision for a 50% increase in the future. The scheme was supported on public health grounds and approved. Included in the scheme was, in effect, a separate scheme to serve 89 properties in the village of Slad, to be connected directly to the Stroud sewerage system.

THORNBURY RURAL DISTRICT

(i) *New Passage Sewer Extension* (£17,000)

A small scheme to serve 7 houses and three other properties with provision for a further five properties. The scheme was supported on public health grounds and approved.

(ii) *Thornbury—Town Map areas 6 and 7—sewerage* (£76,594)

Submitted as part of a larger scheme, total cost £151,000, to provide foul and surface water sewers to serve 21 existing properties with allowance for 1,305 additional properties in the future. The scheme was approved subject to modifications requested by the County Surveyor.

WEST DEAN RURAL DISTRICT

(i) *Central Area Sewerage Scheme* (£492,000)

This is the first of five stages necessary to complete the sewerage of the Central Area and is in two parts, stage 1A, to improve the sludge treatment facilities at the Newland sewage disposal works (£107,000), and stage 1B, to extend the sewerage system in the vicinity of Coleford. The scheme was approved subject to minor technical comments and to reconsideration of certain sections which appeared excessively expensive and for which there was no strong need.

(ii) *Northern Area Pollution Control Scheme* (£160,000)

To extend the Lydbrook sewage disposal works to receive anticipated additional flows from English Bicknor and trade wastes from two factories. The scheme, justified on public heath grounds, was approved subject to consideration of a proposal that the works should be further enlarged to receive also the proposed flows from Ruardean Woodside, The Pludds and Brierley in the East Dean Rural District.

(B.) WATER SUPPLIES

COTSWOLD WATER BOARD

Elkstone, Green Dragon Water Supply (£4,075)

To provide mains water to eleven properties at present served by a private supply which is to be terminated. The scheme was approved.

NORTH WEST GLOUCESTERSHIRE WATER BOARD

Nailsworth, Shortwood Water Supply (£3,355)

To replace a heavily polluted supply to 19 existing properties and to augment an inadequate supply to a further six properties. The scheme was strongly supported on public health grounds and approved.

SODBURY RURAL DISTRICT

The Rosary, Cattybrook Brickworks water supply scheme (£5,720)

A scheme to provide mains water to six properties, at present served by a heavily polluted well, was approved.

2. GYPSIES

Work is continuing on improvements to the Willows site near Gloucester.

Three separate large groups of gypsy families visited the County during the year. The largest comprising 23 caravans, after being evicted from two sites within the County area, finally settled on an old station site at Tewkesbury, in the ownership of the County Council. The majority were persuaded to vacate the site voluntarily after 18 days but nonetheless the County Council were prosecuted by the Tewkesbury Borough Council under Section 1 of the Caravan Sites and Control of Development Act, 1960. In the event the Court decided that there was no case to answer and the case was dismissed. Whilst the present policy of providing well equipped permanent sites will help those gypsy families wishing to settle, such sites will not be able to cope with invasions on this scale and it may be necessary to consider the provision of transit sites for short stay itinerant families.

Negotiations are in progress for the provision of a site in South Gloucestershire.

3. MILK SUPPLY

(i) Licences

There were no changes during the year in the number of pasteurised milk plants so that at the end of 1972 there were eight H.T.S.T. plants and two Holder plants treating a total of approximately 31,500 gallons of milk per day.

The number of milk licences in operation at the end of the year totalled 615 as shown below.

				1972	1971
(a)	Producer/Retailers (licensed by the Ministry of Agriculture, Fisheries and Food, and including 3 producers who retail raw milk by consent) ...			58	67
(b)	Producer/Retailers (included in (a) above) holding a licence from the County Council to bottle untreated Milk from other Producers ...			2	3
(c)	Dairies dealing in Untreated Milk other than in (a) or (b) (' B ' licences)			4	5
*(d)	Milk Dealers (Pasteurisers) (' C ' licences)			11	11
(e)	Dealers in Pre-Packed Milk (' F ' licences) :—				
	(i) Retailers	187		200	
	(ii) Shops	350		324	
	(iii) Vending Machines	3		3	
			540		527
	Total		615		613

* Two pasteurisers using one plant

(ii) **Routine Sampling**

The number of samples of designated milk taken during the year under the Milk (Special Designation) Regulations 1963/65 totalled 3,816.

Details of these are set out in the table below.

SUMMARY OF ROUTINE MILK SAMPLES

Origin of Samples	Designation	Total Samples taken	Phosphatase Test			Methylene Blue Test			Turbidity Test		Ultra Heat Treated Test	
			Pass	Fail	Void	Pass	Fail	Void	Pass	Fail	Pass	Fail
Dealers including Processors	Pasteurised	2,494	2,484	10	—	2,346	81	67				
	Sterilised	32	—	—	—	—	—	—	32	Nil	—	—
	Ultra Heat Treated	62	—	—	—	—	—	—	—	—	62	Nil
	Untreated	816	—	—	—	750	42	26				
Schools	Pasteurised	259	258	—	1	241	13	5				
G.C.C. Properties	Pasteurised	103	103	Nil	—	94	8	1				
Hospitals	Pasteurised	49	49	Nil	—	47	2					
	Untreated	1	—	—	—	1	Nil					
Totals		3,816	2,894	10	1	3,479	146	99	32	Nil	62	Nil

The drop in the total number of milk samples taken is partly due to a reduced number of untreated milk samples following a fall in the number of Producer/Retailers, and fewer samples from schools as the effects of school milk for the under seven year olds only was felt over the whole year.

The ten samples which failed the Phosphatase test involved four dairies, one of which was an out of county plant. Two failures occurred in one of the holder plants where the process is much more subject to manual operation and even when times and temperatures are correctly maintained, the addition, by mismanagement, of a few drops of untreated milk can result in a failed test. Six of the failures were from one dairy and had occurred following incorrect adjustment of the controls.

The percentage of Pasteurised samples failing the Methylene Blue test (3.58%) was the highest since 1966 and is particularly regretted as for the past 4 years this figure has been below 3%. One third of the failed samples were from out of county dairies. A number of other failures could be directly attributed to overkept milk, emphasising the importance of proper cold storage and correct rotation of stocks.

Untreated milk samples which failed the Methylene Blue test were reported to the County Dairy Husbandry Adviser of the Ministry of Agriculture, Fisheries and Food. The percentage here showed an improvement at 5.12%.

(iii) **Milk Containers**

Samples of washed bottles and churns were taken regularly from all pasteurising and bottling plants for examination by the Public Health Laboratory. The results are summarised below.

	Satisfactory	Fairly Satisfactory	Unsatisfactory	Total
Churns	51	11	22	84
Bottles	219	32	37	288

The total of 72.3% in the satisfactory category is an improvement on last year. More dairies are receiving milk in bulk but most of them still have a few churn suppliers, necessitating some form of churn washing.

There were very few complaints received, one of a dirty bottle, another concerning fine particles of foreign matter in the milk and one about discolouration on the underside of the foil cap. All were dealt with informally.

Early in the year a large pasteuriser commenced the use of plastic sachets. Except for cartons, which have only represented a small proportion of dairy out-put, this was the first trial from a dairy within the County of an alternative milk container. From a public health aspect the sachets have several advantages over bottles. The single use pack is virtually sterile and there is no danger of any foreign bodies in the milk container. There was a little initial customer resistance to the change from the traditional bottles but the firm installed a second milk sachet filling machine during the year.

(iv) **Brucella Abortus**

Number of herds from which samples have been taken :—

(i) Producer/Retailer and herds supplying milk to ' B ' licence holders.	76
(ii) Untreated Cream producers (other than in (i) above)	3
(iii) Producers using own milk in connection with farm holidays, bed and breakfast trade, or casual sales to caravanners and campers (other than (i) or (ii) above) ...	26
Total	105
Number of herds investigated further	16
Herds in which one or more infected cows were found	9*

* In several cases where weak reactions were obtained full guinea pig examinations were not carried out, and further examinations of these reactors have still to be made.

All routine statutory samples of untreated milk were examined by the Milk Ring Test, and periodic composite samples were taken from those herds where bottled samples proved negative. In several instances the composite sample showed evidence of infection in the herd when statutory samples, being bottled from a proportion of the milk only, had been reported negative to Milk Ring Test. As a result of follow-up investigations in 16 herds, 27 infected cows were discovered. In view of the follow-ups it is not the usual practice

of the Public Health Laboratory to make any further examination of bottled milk giving a positive reaction. However, in 8 instances statutory samples of milk, as sold for retail were found to be infected. Four separate farms were included and two of these ceased to retail untreated milk shortly after.

Seven of the nine herds where cows infected with brucellosis were found were Producer/Retailers. Three of these ceased retailing milk and the remainder sold the infected cows for slaughter. One other producer retailer, found to have infection in the herd towards the end of 1971, ceased to retail untreated milk in 1972 because it was impracticable to separate a small amount from his bulk milk tank. The two other herds where infected cows were found were " Bed and Breakfast " producers. In one case, one cow was sold and in the other as a number of reactors were involved the farmer ceased to use untreated milk for the " Bed and Breakfast " business.

Liaison has been established with the Divisional Veterinary Officer of the Ministry of Agriculture, Fisheries and Food regarding those Producer/Retailers whose herds are accredited brucellosis free. All samples taken by the County Council were satisfactory. It will be a great improvement when all Producer/Retailers are required to have brucellosis free herds.

A summary of all untreated milk examined for evidence of brucella abortus is set out below.

	Total Samples	Positive to Milk Ring Test	Doubtful (±) reaction to M.R.T	Number found positive to Brucella abortus by direct culture or guinea pig inoculation
Routine Statutory Samples	817	14	4	8 *
Composite herd samples	294	5	2	—
Producers (group iii)	198	2	2	—
Follow-up samples				
(i) Individual cows	465	61	1	27
(ii) Composite	5	5	Nil	1
	1,779	87	9	36

* Positive Milk Ring Tests on routine or composite samples are followed up by individual cow samples. Because of this not all of the original failed samples are examined further. However, eight routine samples, involving four herds, were found to be infected. Two of those farms have now ceased to retail.

(v) **Cream**

54 samples of cream were submitted for examination, results are summarised below.

Type	No. of Samples	Methylene Blue Test Reduction time in			Void
		0 hours (Unsatis-factory)	More than 0 hours less than 4 hours (Doubtful)	More than 4 hours (Satisfactory)	
Untreated	14	6 (42.8%)	6 (42.8%)	2 (14.3%)	—
Heat Treated :—					
(1) Ex Producer	20	6 (30%)	6 (30%)	7 (35%)	1 (5%)
(2) Packed by Retailer	8	6 (75%)	1 (12.5%)	1 (12.5%)	—
(3) Pre-packed mainly from shops	11	3 (27.2%)	2(18.2%)	5 (45.4%)	1 (9%)
Ultra Heat Treated	1	—	—	1	—
	54	21 (38.8%)	15 (27.7%)	16 (29.6%)	2 (3.7%)

The improvement shown in heat-treated cream the previous year was not maintained. Although fewer samples were taken there was a considerable percentage increase in those failing at 0 hours and a reduction in the percentage of samples proving satisfactory. There was a small improvement in the few samples of untreated cream.

(vi) **Tuberculosis**

During the year discussions took place with the Director of the Public Health Laboratory at Gloucester and the Divisional Veterinary Officer on the need for continuing examination of milk samples for tuberculosis and it was agreed that in view of the very rare incidence of this in milk, no further samples should be taken. Forty three samples were taken up to July, all of which proved negative.

(vii) **Milk in Schools**

With the free supply of 1/3 pints of milk to the under seven year olds, a number of schools considered schemes to obtain milk for sale to junior pupils. Such schemes are operated at 44 individual schools where there has been sufficient parental demand and it is a condition of the scheme that the milk must be sold or otherwise disposed of on the day of delivery to the school.

(viii) **Summary of Samples ; Milk, Cream, and Milk Containers**

Statutory dealer samples	3,406
Routine samples from schools and institutions	412
Brucella examinations	1,779
Tuberculosis examinations	43
Cream	54
Bottle and churn examinations	372
Total	6,066

4.(i) REPORT ON THE WORK CARRIED OUT BY ANIMAL HEALTH DIVISION, MINISTRY OF AGRICULTURE, FISHERIES AND FOOD, GLOUCESTER, DURING 1972, BY W. SIMPSON, ESQ., M.R.C.V.S., DIVISIONAL VETERINARY OFFICER.

Livestock Census June 1972

Cattle	243,800
Sheep	257,727
Pigs	117,174
Poultry	2,167,670

Notifiable Diseases

Disease	1970		1971	
	Negative Reports Investigated	No. of Confirmed Cases	Negative Reports Investigated	No. of Confirmed Cases
Anthrax	212	1	168	3
Foot and Mouth Disease	2	—	—	—
Fowl Pest (Newcastle Disease) ...	8	14	30	122
Rabies	7	—	5	—
Swine Fever	—	—	2	—
Tuberculosis	—	—	—	—
Swine Vesicular Disease	—	—	—	—

Anthrax

While the number of suspected cases was slightly higher, only one case was confirmed.

Diseases of Animals (Waste Foods) Order, 1957

Inspections of licenced premises were carried out in conjunction with local authority staff. The need for supervision was increased with the outbreaks of Swine Vesicular Disease in the neighbouring counties at the end of the year.

Tuberculosis

There was some reduction in the number of farms showing active infection, but this was only marginal. Further work has been carried out in trying to establish a connection between the disease in bovines and that in local wildlife.

Brucella Abortus Infection in Dairy Herds

Interest continues in the Brucella Accredited Herd Scheme. At the year end there were 451 fully accredited herds plus 218 pipeline herds out of a total of 1,617 registered. Of 55 producer/retailers 23 are accredited and 12 under test.

Poultry Health Scheme

Again, no reactors to the Salmonella Pullorum (B.W.D.) tests were found. There was less interference with the testing programme.

Salmonellosis

There does not appear to be any increase in the total confirmed cases of salmonellosis but S. Typhimurium outbreaks would appear to have increased.

The Slaughterhouse (Hygiene) Regulations, 1958

The Slaughter of Animals (Prevention of Cruelty) Regulations, 1958

Regular inspection of slaughterhouses and knacker yards were carried out in conjunction with the local public health inspectors. Some assistance with meat inspection was given at the beginning of the year.

Markets (Protection of Animals) Order, 1964

Markets (Protection of Animals) (Amendment) Order, 1965

Markets (Fairs and Lairs) Order, 1925

Markets were inspected regularly including poultry markets.

Fowl Pest (Newcastle Disease)

1971 saw the introduction of two live vaccines for Newcastle Disease—Hitchener B.1 and Lasota. Full use of these appears to have exercised considerable control on the outbreaks of Essex 71 strain of the virus. Control of Newcastle Disease was varied by the Newcastle Disease (England and Wales) Order 1971.

Rabies and the Rabies (Importation of Mammals) Order, 1971

The above order came into operation in January, and controls importation and quarantine of those animals other than domestic dogs and cats which are liable to be infected with rabies. There are two kennels in the County approved for the quarantining of imported dogs and cats.

(ii) **Diseases of Animals (Waste Foods) Order, 1957**

Two new licences were issued during the year but the total number of premises licenced to boil waste food fell from 74 to 66 due to 10 licences being revoked in respect of premises where the use of waste food for animal feeding was discontinued. Regular visits were paid by officers of the Health Department to all waste food boiling premises during the year.

SECTION E

REPORT OF THE PRINCIPAL DENTAL OFFICER

The year 1972 was increasingly overshadowed by impending changes. Not only will the County's dental service be cut in half, but it will change masters. Some of the fogs of uncertainty were at least thinned by the publication of the White Paper and the Management Arrangements for the reorganised health services. A cynic might be forgiven for saying that if the dental service for children continues to improve, it will be in spite of rather than because of the complex arrangements of the " grey, grey book." One encouraging feature is that recruitment of dental officers improved yet again, with several applicants for each post advertised. Recruitment of dental auxiliaries continues to be disappointing. With only three in post, compared with eight in 1970, resources have been switched to the employment of dental officers. It is clear that the role and training of dental ancillary workers need to be re-examined nationally.

Mr. L. H. Stratford died suddenly in June at the age of 57, and our sincere sympathy goes to his widow, who had also served the County part-time as a dental surgery assistant. Three dental officers left—two to general practice and one to the Royal Army Dental Corps. A fifth transfers to another authority on 1.1.73, and Mr. P. B. Stone, area dental officer in Cheltenham, leaves for general practice at the same time. Mr. J. B. Clarke has been appointed as his acting successor. Five new dental officers took up posts during the year, and two more were appointed to start in January, 1973. All were under the age of 30. It is interesting

that three come from the London area, with experience in general practice, and three are recent graduates of the University of Wales. One part-time dental officer and one part-time orthodontist rejoined the staff, while one officer changed to part-time work. Two dental auxiliaries left and no suitable replacements were available.

The result of all these changes was that on 31.12.72 the total staff amounted to the equivalent of 28.6 dental officers, one more than on 31.12.71. By the end of January, 1973, the staff is expected to be the equivalent of over 29 dental officers, but with a continued reduction of auxiliary manpower. The effects of this reduction on dental health education activities and consequential steps are discussed by Mrs. Miles in the dental health education section. Staff changes, absences for illness and other causes, reduced the total number of clinical sessions worked from 12,956 in 1971 to 12,111 in 1972. Despite this, more children were inspected and treated.

Fig. 1 shows the changes over a ten-year period compared with the expanding school population, and table A the proportion of time spent on different types of work.

Fig. 1. Manpower—School Children per Dental Officer (Auxiliaries added)

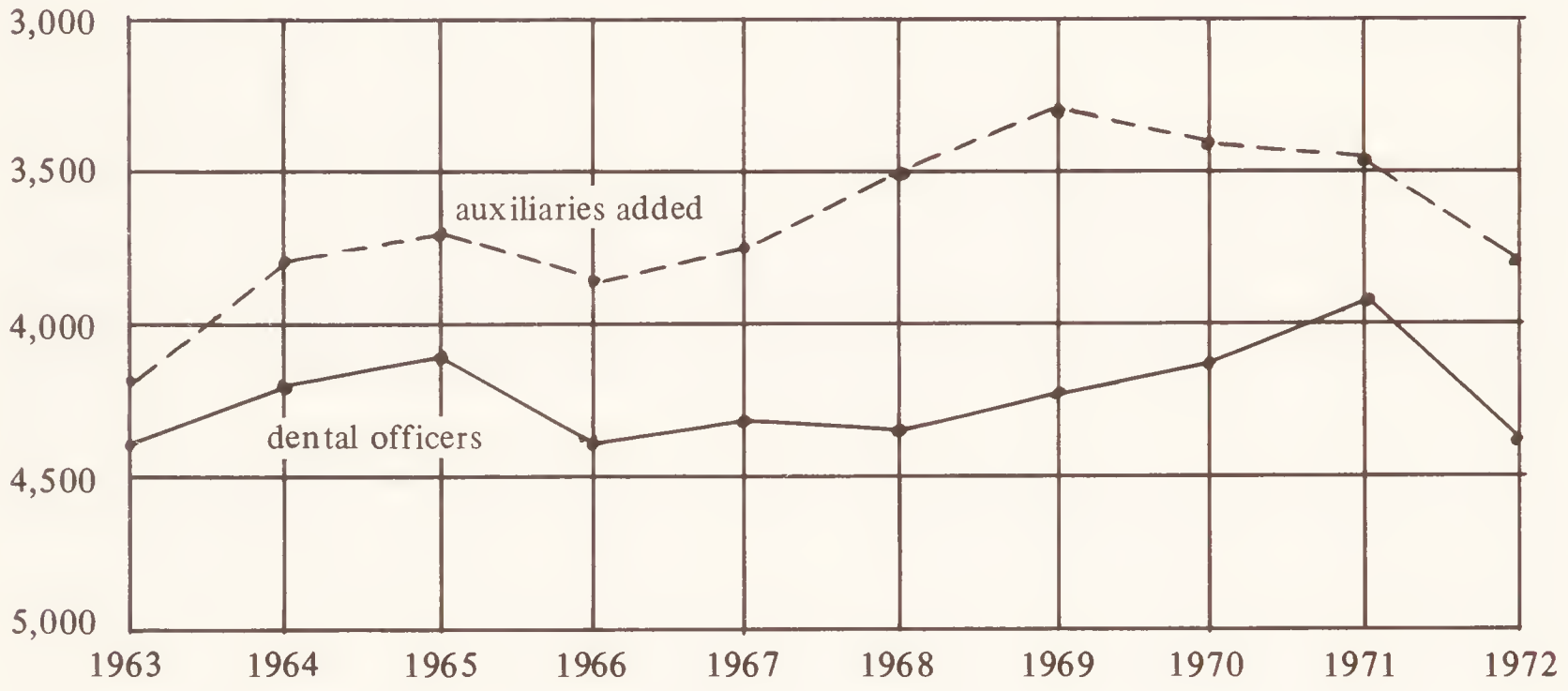


Table A—Allocation of Sessions

	Dental Officers				Dental Auxiliaries			
	1972		1971		1972		1971	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
School Inspections	824	7·6	730	6·4	—	—	—	—
Treatment in Fixed Clinics (School)	5,489	50·7	5,763	50·7	655	39·7	790	38·4
Treatment in Mobile Clinics (School)	2,754	25·4	3,093	27·2	530	32·2	733	35·6
Orthodontics	1,243	11·5	1,182	10·4	—	—	—	—
M. and C.H.	484	4·4	567	5·0	91	5·5	68	3·3
Administration of General Anaesthetics	41	0·4	30	0·3	—	—	—	—
Dental Health Education (School)	—	—	—	—	152	9·2	243	11·8
Dental Health Education (M. and C.H.)	—	—	—	—	220	13·4	225	10·9
Total	10,835	100·0	11,365	100·0	1,648	100·0	2,059	100·0

Working towards the new groupings in Gloucestershire and Avon, plans were drawn up for integration of the dental service in Cheltenham Borough with that of surrounding County areas. It is expected that these will be implemented in 1973, and that substantial progress will be made in a similar direction with Gloucester City. I believe that both public and staff will benefit from the removal of artificial boundaries.

In the South only limited progress has been made in the Avon area as a whole, but Mr. Stables, area dental officer in the South, has been encouraged to form the County dental services in the future Avon area into an entity which can be separated from the rest of the County with minimum trauma. He reports on the year's work in South Gloucestershire.

Report on South Gloucestershire 1972 (Mr. D. K. Stables)

The reorganisation of Local Government due to take place on April 1st, 1974, has meant that the South of the County has gradually become more and more a separate entity as far as the County dental service is concerned. During the year, slight modifications to the boundary between the new County of Avon and the reconstituted Gloucestershire have been made, mainly in the Berkeley/Sharpness area.

It is encouraging to record that the Bristol City Council have agreed in principle to the fluoridation of water supplies and have taken the initiative in consulting with other authorities in the Bristol Waterworks Company's area. At the present time it is not clear whether responsibility for fluoridation will rest in future with the new County Councils or with the Area Health Authorities, but this important Public Health measure should be introduced at the earliest opportunity. In the meantime, the County have commenced an experiment at Yate with subsidised fluoride tablets for pre-school children.

Mr. Stratford died suddenly at the end of June and will be remembered for his kindness and general imperturbability. He was not replaced by a whole-time officer until December. In order to try to keep abreast of demand at Yate, an additional dental officer was appointed in July, and Miss Hunt was promoted to Senior Dental Officer. At the same time the dental auxiliary's clinical sessions were changed from Yate to Cadbury Heath.

After considerable delays, the Kingswood Health Centre was eventually brought into operation at the end of November. The two surgeries there, one equipped for low seated dentistry, replace the inadequate temporary premises at 23 Laurel Street. The third surgery at Downend has been equipped to take an air turbine and thus make it suitable for operation other than solely for orthodontics.

2,907 sessions were worked by dental officers and 618 by auxiliaries doing clinical work. In addition 19½ sessions were worked at Kingswood Training School. 32 of these sessions were for general anaesthesia, a decrease of 2 over the preceding year. Compared to 1971, dental officer sessions were 93 fewer, and auxiliary clinical sessions 195 more. The former shows increased use of part-time dental officers following Mr. Stratford's death, and prolonged absence of two or three officers for various reasons. The latter reflects the full year's work of Mrs. Nichols.

9,149 courses of treatment were given to 7,890 school children, and 436 to mothers and pre-school children. The latter comprised 94 mothers and 291 pre-school children. The last figure is rather depressing when one sees at the first school inspection the amount of untreated dental disease that could—and should—have been prevented or, if not prevented, treated early. The figures show a slight increase in total numbers of school children treated, and a further increase in subsequent courses. Mothers, too, increased slightly in number, but fewer pre-school children were treated. Fractionally fewer new patients were seen each session. Only 75.29% of the school population was inspected, 68.76% at school and 6.53% at clinic, and 91.72% of courses commenced were completed.

I would like to thank the office staff in Gloucester for their tolerance and help, and all staff in what will probably become North Avon, for their support through the year.

Clinics and Equipment

Apart from Kingswood Health Centre, work started on Stroud Health Centre, with a 4-surgery suite. Reasonable progress was made with replacement of obsolete equipment, especially operating lights. Several units and chairs were replaced, and compressors and air/water syringes added to all mobiles which lacked these facilities. Two new mobiles, redesigned for low-seated dentistry, were ordered but not quite completed by the end of the year. A great deal of equipment is over 20 years old, and, as pointed out by the Departments following a visit of inspection by Mr. C. Howard, much remains to be done to bring equipment up to modern standards. It appears unlikely that the money required will be available in the near future.

Prevention of Decay

Prevention can be considered under two heads—strengthening the resistance to decay of the tooth, and improving the tooth's environment which is responsible for the decay. The former involves an adequate level of fluoride throughout life, and especially in childhood when teeth are forming. A controlled level of one part per million in the water supply is by far the most effective and the cheapest way to achieve this objective. Since the County Council has not accepted fluoridation, other methods have been used on a very limited scale.

The results of Mr. Willetts' four-year study of applying fluoride topically showed that the effect was beneficial, especially with certain types of lesion round the neck of the tooth. In cost/effectiveness aspects, the time spent in preventing decay generally was greater than that needed to restore the teeth. This method therefore could not be recommended as a practical measure except for a few selected cases.

Mouth rinsing with a 2% sodium fluoride solution was used in two schools in the Tewkesbury area for a limited number of classes. A base-line survey was carried out, but the results will not be available for several years. The results of a study carried out by the Manchester Dental Health Unit are expected next year. The practical side of mouth rinsing is mentioned in Mrs. Miles' section. Whether extension of mouth rinsing to other schools can be recommended is still under discussion.

The County Council agreed to a scheme to supply fluoride tablets for children aged 1 - 4 inclusive to mothers attending Cinderford and Yate Health Centres. Following a publicity campaign which included press and television, an exhibition at each centre and letters to every eligible parent, a month's supply of 1 mg. tablets of sodium fluoride was available with welfare foods at a cost of 2p per packet. All sales were

recorded, so that initial and subsequent uptake by the same family could be judged. The results of this scheme, heavily and expensively loaded to achieve success, should be available in 1973.

The second aspect of prevention—improvement of tooth environment—is dealt with in the next section. Mr. Pengelly discusses the changes in the prevalence of decay, which is the yardstick of the success or failure of the County's preventive work, in that section.

Dental Health Education (Mrs. U. Y. Miles)

On the whole 1972 was an encouraging year for dental health activities. In spite of no more auxiliaries being recruited to this County, and a heavy loss of sessions due to sickness, a full and varied programme was undertaken. During the year another dental surgery assistant joined our team, visiting and talking to play groups in her clinical area, and also our first two dental health assistants were appointed. The first one's interest in this work had started many years ago as a dental surgery assistant, and was later stimulated by our talks to the play groups she had been organising. The second had worked intermittently for the County as a part-time dental surgery assistant, had a public speaking diploma and a desire to talk about dental health. A considerable amount of time was therefore spent in training these people. I feel, and in fact have proved, that the utmost amount of training is essential and forms the whole basis for talks. There is so much to learn, not only about teeth and dentistry, but about people, and the most important but unfortunate fact is that the majority of people are not interested in teeth. Our aim must therefore be to promote interest, make allowances for human failings, and give positive but practical advice.

Because of the County's lack of support for water fluoridation, other limited means of administering fluoride were started this year. In April fortnightly mouth-rinsing commenced based on the Edinburgh scheme, but on a much smaller scale. Two schools in the Tewkesbury area were chosen, with six year olds only initially taking part. It was hoped that eventually up to the nine year olds would be included ; however, much still depends on cost and co-operation. The scheme has been set up under the direction of Mr. Pengelly, with appropriate dental inspections having taken place. Practically, the important factor to me is the enthusiasm of the children to co-operate in the knowledge that this is just one way we are helping to strengthen their teeth. They realise they are the fortunate ones and they are constantly reminded that their part is to keep sweet things to tea-time. One day they may appreciate that the combination of the two has contributed to their happiness and enjoyment of life.

For the fluoride tablet scheme, mentioned above, the health education section and I collaborated in arranging displays at the health centres at Cinderford and Yate. It was significant to me when arranging publicity with the local press that the one weekly newspaper chose to make the scheme headlines, whilst in the other area it was not found worthy of mention. This typifies the contrast and the whole attitude to dental health found in these two places. I await the results with great interest.

The County's caries prevalence figures suggest an improvement from the 5 to 14 year olds ; not only in the number caries free but in those with gross caries also. Area variations are still apparent, and because of sudden fluctuations which often occur such figures are always viewed very cautiously. However, generally the five year olds' improvement seems to be stabilizing and optimistically we hope it is due to some influence of dental health on mothers. The dental health team is fully aware that this improvement did not necessarily result from our activities alone, but nevertheless these figures supply us with a much needed boost.

Table B—Dental Health Education

Sessions :

Auxiliaries	=	372½
Dental Surgery Assistants	=	211
Dental Health Assistants	=	37
Dental Health Education Officer	=	1 full time

Activities :	No. Visited		No. of Visits or Talks	
	1972	1971	1972	1971
Mothercraft	31	32	170	138
Play Groups	105	63	117	114
Child Health Clinics	98	78	148	127
Schools—Primary	135	169	669	688
Secondary	8	6	14	17
Other Audiences	45	25	45	25
Total	422	373	1,163	1,109

Fluoride Mouth-rinsing—32 Sessions

9 Displays and 8 Exhibitions held

On the whole there was a slight increase in dental health talks. Our policy of regarding mothercraft sessions as our most important activity was continued. The child health clinics, of which we visited more in 1972, provide a follow up to the mother and young child and thereby furnish us with invaluable information such as the numerous difficulties facing these mothers in trying to restrict sweet things. Play group organisers once again welcomed us and many provided further support by supplying cheese flavoured biscuits only to the children as their mid-morning snack. Although the number of primary schools visited were fewer, the actual talks to juniors increased, but once again, little time was given to secondary schools. Perhaps with the raising of the school leaving age now in force it may be possible to offer dental health as a subject for discussion to this older age group. I fully appreciate, however, the difficulties that this audience presents.

More displays and exhibitions were held than in the previous year, and favourable remarks were made in many areas about these. Because of our constant shortage of manpower, exhibitions have for many years not played a too important part in our activities. So much time and effort is required to produce a worth while display, that they are kept to a minimum. Not only were we once again welcomed to St. Paul's College, where Mr. Smyth lectured to a large group of students and an exhibition was staged, but interest was raised at St. Mary's College also. I talked to a few students who were specialising in health subjects and made arrangements for an exhibition to be displayed later. It seems evident to us that the younger teachers are becoming keenly aware of the important part they play in dental health and the support they could give to interested mothers.

Several dental health meetings were held during the year where the team spirit was very apparent ; all of us equally keen to improve the dental health of children. The auxiliaries were pleased to be allowed to attend the New Cross Open Day and their Annual General Meeting days. On several occasions we were welcomed to local dental associations' lectures and gratefully found these most worth while. The support of the Milk Marketing Board and the late Cheese Bureau in supplying interesting and informative booklets to us for distribution to Mothercraft classes has been gratefully received. I hope still more co-operation lies ahead because we have much in common. The sessions devoted to pre-school invitations increased and now seem to be getting very established in the Forest area. Long-term, one hopes to feel the effect of this early introduction to the dental clinic, but like dental health education generally, it is often years before it can be detected.

Finally my thanks to all who have co-operated and helped us in promoting dental health in this County. We are grateful to Mr. Smyth for encouraging us in all we do. The future without doubt holds many obstacles and it is only this continued support which will help us to overcome them.

MEASUREMENT OF RESULTS—CARIES PREVALENCE (Mr. J. P. B. Pengelly)

The number of children free of decay and with 10 or more decayed, extracted or filled teeth at the ages of 5 and 8 years, and those aged 14 years with one or more decayed, missing or filled incisors, are recorded at each school dental inspection and are shown in Table C.

These simplified investigations have been recorded since 1963 and are used (among other purposes) to measure the effectiveness of the preventive dental health programme which has as its objective a reduction of the level of dental decay.

The percentage of 5 year old children free of caries has risen from the highest ever recorded at 25.8% in 1971 to 29.4%. Of even greater importance, the percentage with 10 or more primary teeth affected by decay (dental cripples) has been reduced from 10.2% in 1971 to 8.6% this year. These findings give rise to cautious optimism. If the impact of the dental health education programme concentrated on the mothers of young children is now showing in the benefit to the teeth of the 5 year old intake at schools, then further improvements should be recorded in future years. The improvement is not apparent in all areas and in consequence some adjustments may be necessary in the time spent in dental health education in different parts of the County.

The 8 year old children also show an improvement over the 1971 findings. These children were examined at the age of 5, three years before, and have now been subject to school influences. The improved findings are predictably better than those of 1971 because the children examined at 5 years old in 1969 showed an improvement over those examined in 1968. The caries free rose by 1% and at 9.4% is the highest recorded, while the children with all primary molars affected dropped by 1.6%.

It is encouraging to find that the number of 14 year old children with one or more decayed, missing or filled front teeth fell by 1%. As stated in the 1971 Report, a steady rise was anticipated until 1975 as a consequence of increased sales of sweet biscuits to primary school children in the middle '60s at a time when the front teeth of the present 14 year old children would be at risk. We would be unwise to take this year's improved figure of 28.1% in isolation and judgement should be reserved. A discussion of the relationship between sales of biscuits in primary schools and incisor caries in secondary schools in the County appeared in " Public Health " in May, 1972.

Table C—Caries Prevalence in Gloucestershire—1972

Type of Area	District	5 year old children					8 year old children					14 year old children		
		Number inspected	Number with no d.e.f. teeth	Percentage with no d.e.f. teeth	Number with 10 or more d.e.f. teeth	Percentage with 10 or more d.e.f. teeth	Number inspected	Number with no d.e.f. molars	Percentage with no d.e.f. molars	Number with 8 d.e.f. molars	Percentage with 8 d.e.f. molars	Number inspected	Number with 1 or more d.m.f. incisors	Percentage with 1 or more d.m.f. incisors
Urban	Cheltenham Borough	924	288	31·2	82	8·9	999	105	10·5	246	24·6	202	52	25·7
	Cheltenham Suburbs	475	150	31·6	35	7·4	438	57	13·0	151	34·5	206	61	29·6
	Gloucester Suburbs	335	65	19·4	44	13·1	455	36	7·9	151	33·2	170	57	33·5
	Bristol Suburbs	1,527	549	36·0	82	5·4	1,627	166	10·2	414	25·4	1,118	260	23·3
	Stroud and District	402	95	23·6	29	7·2	384	34	8·9	130	33·9	374	137	36·6
	Area Total	3,663	1,147	31·3	272	7·4	3,903	398	10·2	1,092	28·0	2,070	567	27·4
Small Towns (Pop. 1,500 to 10,000)	Forest of Dean	462	84	18·2	66	14·3	530	23	4·3	246	46·4	585	202	34·5
	North Severn Vale	199	46	23·1	26	13·1	219	14	6·4	73	33·3	216	86	39·8
	South Severn Vale	451	154	34·1	29	6·4	486	34	7·0	157	32·3	791	176	22·2
	North Cotswold	121	41	33·9	10	8·3	151	17	11·3	57	37·7	315	106	33·7
	South Cotswold	287	77	26·8	22	7·7	319	32	10·0	107	33·5	501	121	24·2
	Area Total	1,520	402	26·4	153	10·1	1,705	120	7·0	640	37·5	2,408	691	28.7
Villages	Forest of Dean	239	45	18·8	37	15·5	265	20	7·5	105	39·6			
	North Severn Vale	221	66	29·9	20	9·0	263	34	12·9	83	31·6			
	South Severn Vale	263	76	28·9	20	7·6	252	29	11·5	77	30·6			
	North Cotswold	187	53	28·3	22	11·8	171	17	9·9	68	39·8			
	South Cotswold	285	85	29·8	22	7·7	252	21	8·3	65	25·8			
	Area Total	1,195	325	27·2	121	10·1	1,203	121	10·1	398	33·1			
	Grand Total	6,378	1,874	29·4	546	8·6	6,811	639	9·4	2,130	31·3	4,478	1,258	28·1

ASCERTAINMENT OF NEED—INSPECTIONS

As can be seen from table D, fewer pre-school children were seen. Apart from an increase at Yate and Cinderford, smaller numbers were returned from all clinics. If we knew that these young children were being taken to family dentists, there would be no cause for concern. Such information is not at present available ; unification will in time, it is hoped, enable a more complete picture to be given.

More school children were inspected, either at school or in the clinics, totalling 75% of the school population, as shown in figure 2. From table E can be seen the smaller proportion needing treatment, probably as a result of better coverage in previous years rather than the fall in total prevalence of decay. The proportion receiving regular treatment from general practitioners remained constant and the load on the school service diminished to below the 1970 figure. The most encouraging trend is the steadily lessening number who get no regular treatment from either source.

Table D—Numbers Inspected

	Inspected		Requiring treatment	
	1972	1971	1972	1971
Mothers	161	160	155	153
Pre-school	1,980	2,179	1,083	1,210
School—Routine (1st)	71,661	60,939	47,765	43,228
School—Special (1st)	7,325	6,657	5,767	5,405

Fig. 2—Percentage of School Population Inspected.

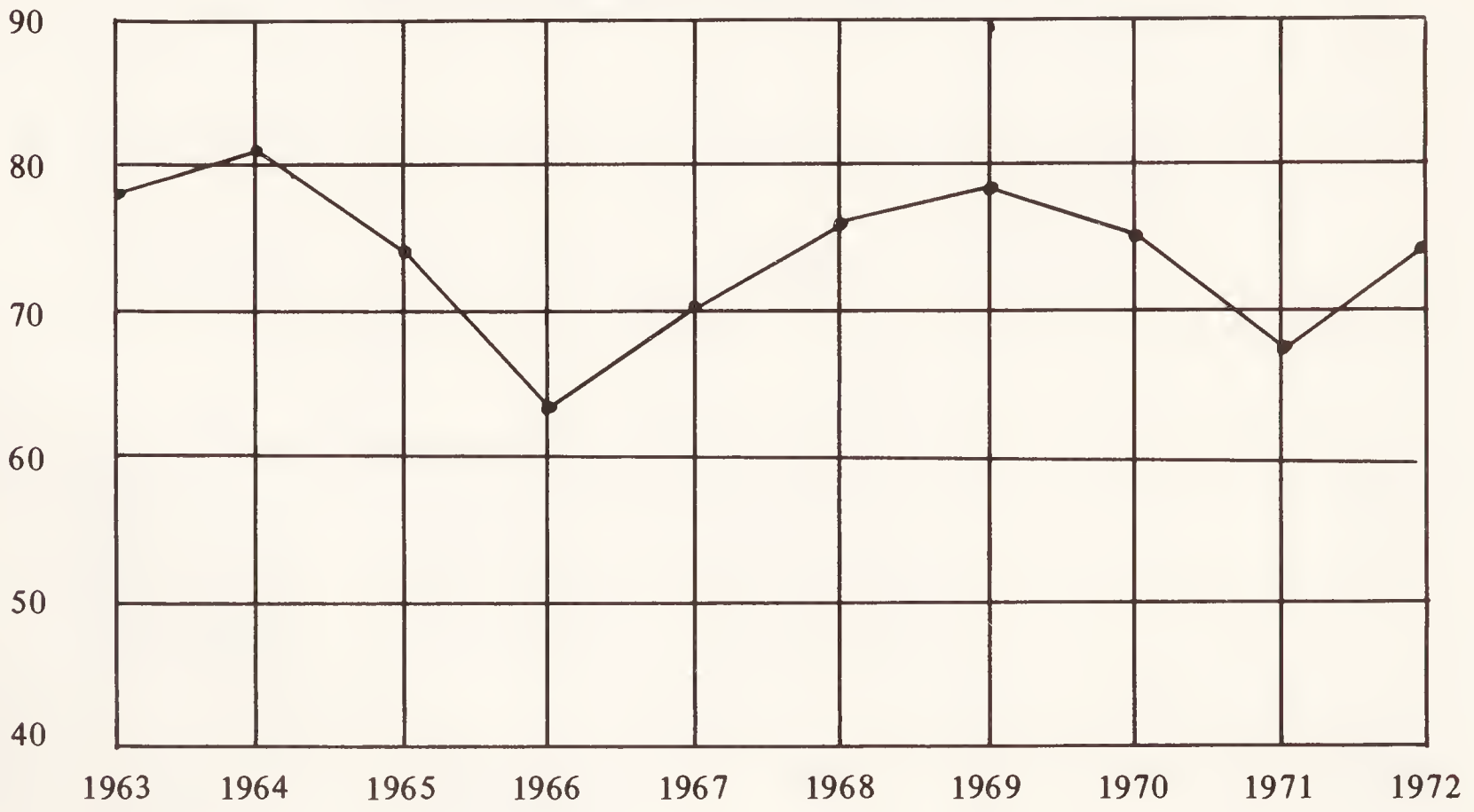


Table E—Findings at School Dental Inspections (per cent.)

		1972	1971	1970
	Not Requiring Treatment	36.4	32.2	33.0
Requiring Treatment	Receiving Treatment—School Dental Service	28.1	30.4	28.8
	Receiving Treatment—General Dental Service	17.0	17.0	16.9
	No Regular Treatment	18.5	20.4	21.3

TREATMENT

Table G gives a summary of the total work carried out for mothers, pre-school and school children, while table H shows changes in the pattern of treatment. The pattern shows some increase in tooth loss and decrease of conservation, although the proportion of teeth filled to teeth extracted is still good. The total objectives of the service were discussed at great length during the year by the area dental officers and small groups of dental officers.

The suggested definition of long-term objective was " a mature dentition with no untreated carious lesions, no active gingival abnormality, no functional or aesthetic malocclusion and space for third molars if present." The mature dentition will, in fact, be the end result of a process of development, modified by operative treatment which started from birth or before. The questions to which an answer was sought were concerned with the relevance of various types of treatment at intermediate stages to the achievement of the final objective. If any treatment, however desirable at the time, appears to be irrelevant to the final result, it will consume time which could have been spent on other children. In 1972, more children were treated, although less sessions were available for treatment. I believe we have a long way to go before we understand adequately the relevance of extensive conservation in the developing dentition to the final result. But it may well be that the changing pattern indicates a more thoughtful approach by the staff to the problems and challenges of community dentistry.

Table F—Visits and items of treatment

	Mothers		Pre-School		School	
	1972	1971	1972	1971	1972	1971
Patients treated	154	152	1,091	1,172	24,729	24,329
Total visits	519	474	2,385	2,692	63,122	65,078
Courses commenced ...	170	170	1,233	1,331	28,083	27,275
Courses completed	146	137	1,037	1,146	25,781	24,904
Permanent teeth filled ...	376	371	—	—	35,329	39,860
Permanent teeth extracted for caries	113	115	—	—	1,752	1,890
Permanent teeth extracted for Ortho.	—	—	—	—	1,770	1,512
Deciduous teeth filled ...	—	—	2,081	2,548	16,809	18,249
Deciduous teeth otherwise conserved	—	—	119	110	1,638	1,657
Deciduous teeth extracted ...	—	—	870	859	11,070	10,245
General anaesthetics ...	7	7	305	295	2,837	2,672
Prophylaxis	88	89	141	95	3,519	3,187
Dentures	21	21	—	—	61	96
Patients X-rayed	36	30	10	7	2,546	2,035

Table G—Treatment per 100 patients

	Mothers			Pre-School			School		
	1972	1971	Av. 1966 -70	1972	1971	Av. 1966 -70	1972	1971	Av. 1966 -70
Fillings (permanent teeth) ...	271	269	195	—	—	—	173	199	178
„ (deciduous teeth) ...	—	—	—	220	253	219	77	83	73
Total Extractions	73	76	126	80	73	84	58	56	56
Ratio of teeth filled to teeth extracted for caries (permanent) ...	3.3	3.2	1.6	—	—	—	20.2	21.9	20.3

Orthodontic Treatment

Reference to table A shows that more time was spent on this aspect of the service. The demand increases steadily, but is still undoubtedly less than the need. Orthodontic treatment requires a high level of co-operation from both patient and parent, so that careful initial screening is essential to avoid time and money being wasted on children who fall by the wayside. Limited resources must always be deployed where they will achieve the greatest good. The success of dental officers' screening is indicated by the maintained small number of discontinued cases. The slight apparent increase is due to a larger number

of children transferred to other authorities. Adequate diagnosis and prognosis are also essential factors in success, so that the right treatment can be given at the optimum time (in dental age) to each child. In the past, time has been wasted on treatment at too early an age, with subsequent relapse. Current practice of normally delaying treatment until the " mixed " dentition is over produces stable results. The need to save adequate space for the final dentition is also more keenly appreciated in modern practice, so that planned extractions are an essential part of orthodontic treatment. In fact, in 1972 more permanent teeth were removed for this reason than were lost directly from caries, as table F shows.

Table H contains a comparative summary. Appliances only were used for 585 (33%) cases, appliances and extractions for 1,137 (64%) and extractions only for 53 (3%). Fixed appliances totalled 16, and removable 1,408. Of new cases started, 119 (21%) were undertaken by dental officers, and 91 of the total treated had been referred by general dental practitioners. Mr. Everard continued his attachment to the Gloucester cleft palate unit, and he and Mrs. Popplewell continued their bi-monthly sessions at Bristol Dental Hospital.

Table H—Orthodontic Treatment

	Number	Percentage of total under treatment	Percentage increase or decrease over 1970
Cases under treatment, 1972	1,775	—	—
New cases started in 1972	590	33	—6
Cases completed in 1972	424	24	—6
Cases discontinued in 1972	76	4	+1
Total completed or discontinued in 1972	500	28	—5
Cases c/f to 1973	1,275	73	+7

Anaesthetics

Medical anaesthetists attended 186 of the 227 sessions. Most of the remaining 41 sessions were in fact aggregated from part sessions in Cheltenham, where the service is being used increasingly as an " on demand " immediate extraction service. This facility, clearly appreciated by many parents, raises a number of issues, which are currently being discussed. Local anaesthesia was used for 50% of extractions for school children and 11% and 60% in the case of pre-school children and mothers respectively.

Prolonged anaesthesia for conservation was used in 42 cases for handicapped children. Very nervous children, who did not require complete anaesthesia, were found by Mr. Stone in Cheltenham to be greatly helped by " relative analgesia."

Dental Laboratory

Provision had been made for an additional technician to be appointed during the year to cover the anticipated needs of a consultant orthodontist on the staff of the hospital. Since the latter appointment was not made, it was decided to appoint a new apprentice, since the existing apprentice was in his final year. This procedure would enable the fourth year apprentice to continue as a technician in 1973, maintaining at the same time a sound apprentice structure.

The staffing level during the year, together with the efficiency possible with a purpose-built laboratory and adequate clerical assistance, enabled all demands of the County and hospital staff to be met. The hospital oral surgeons increasingly requested the presence of a technician at certain operations, and it was normally possible to meet those requests without disruption of actual laboratory work. The staff

deserve congratulations on the high standard which has always marked the County dental laboratory, particularly in view of the increasing complexity of appliances required by orthodontists and oral surgeons.

Table I—Work of the Dental Laboratory

Ortho-dontic Appliances	Dentures	Repairs and Relines	Crowns and Inlays	Study Models (pairs)	Splints and Special Appliances	Total No. of Operations
1,449	242	42	109	1,357	72	4,583

TRAINING

Mr. Pengelly's dissertation on a comparison of caries prevalence in 14-year old children in Bristol suburbs and the Forest was accepted by Birmingham University, who conferred on him the Diploma in Dental Health. He had gained the London Diploma in 1971. Mr. Stables started the course in Bristol in October.

The courses for dental surgery assistants at Bristol and Gloucester continued, and ten passed the examination during the year. Seven are currently attending courses, and only one failed her examination at the first attempt.

Five dental officers attended a course on " The dentist, his team and the community ", Mr. Everard the conference of the British Society for the Study of Orthodontics and other members of staff, including auxiliaries and technicians, attended a number of appropriate meetings. One technician is currently attending the advanced orthodontics course in Birmingham, where the apprentices also attend appropriate courses. I believe that such courses and meetings are essential to the maintenance of keenness and up-to-date knowledge.

CONCLUSION

The year has not been an easy one, and it is inevitable that 1973 will be more difficult. All members of staff deserve congratulation on the amount of work which has been accomplished during the year. Increasingly heavy loads have been borne by the small central dental office staff, especially at the end of the year when Miss Gardner resigned. The " back room " people are often forgotten, and I am glad to take this opportunity of thanking them.

The County dental service has developed into one of the most complete and forward-looking in the country, and will make a great contribution to the dental services in Gloucestershire and Avon in 1974. What is essential is that in the upheaval of transfer nothing that is of value be lost. Unification offers great possibilities, but holds many dangers.

SECTION F

SCHOOL HEALTH SERVICE

(i) STAFF

During the year 2 full time medical officers and 1 part time have left us but we have recruited 2 full time medical officers and 6 part time medical officers. The 2 full time medical officers have each been replaced by 2 part timers so their areas remain intact but are served by 2 officers instead of one, each having their own specific work load of clinics, primary and secondary schools. We have also recruited 2 more part time medical officers to cover the long vacant area around Gloucester so can report that, at the end of 1972, we are fully staffed.

During the year one medical officer attended the full time course for developmental assessment in London, and 2 are currently attending a day release course for one academic year in Bristol. With 1 part time senior departmental medical officer and 1 starting in January, 1973 who are virtually peripatetic, the County is well able to do all the assessments necessary.

The policy of " attachments " has proceeded—the attachment of Dr. Hebe Welbourn to the Spina Bifida unit at Frenchay Hospital continued to be of great value—this is a real example of the strength of community medicine with a complete liaison of consultants, school medical officers, health visitors and social workers with the resultant happy liaison with the Chief Education Officer's department regarding school placements. Other medical officers have attachments to g.p's, paediatricians, and child guidance teams and there is a regular flow of medical officers through the audiology assessment units and E.N.T. out patients. All-day meetings of all medical officers have been held monthly throughout the year with in-service training occupying more than half of each meeting. There have also been meetings of medical officers with all members of the School Psychological Service and more locally with area directors of Social Services and their staffs. Case conferences are frequently arranged when all those who are involved with a child and his family meet together to pool information.

Early in 1973 it is planned to form two speech and hearing teams with a medical officer with special interest in this speciality being a member of each team.

(ii) Developmental Assessment Course

During the summer a 3 day Developmental Assessment Course was arranged at the Post Graduate Medical Centre in Cheltenham for sessional medical officers attending child health clinics. This was well attended and much valuable information gained by all.

(iii) School Medical Examinations

The new school medical programme with preliminary visits and intensive discussions with head teachers and staff of schools is proving very satisfactory. Medical officers find themselves better able to help those children with problems under observation and the schools are much happier with the frequent visits by the medical officers. As quite a few head teachers have said, " we really feel we have a doctor of our own to whom we can turn at any time," and indeed there are frequent interchanges by telephone between heads and medical officers in addition to the visits to the schools.

At the pre-school medical inspection a substitute 10bM is completed with relevent information regarding each child ; this is taken to the school in advance of the child starting school so the medical officer and the head teacher can discuss any problem which might arise when the child ultimately comes to school—this has been welcomed by the head teachers.

The policy of keeping handicapped children at normal schools whenever possible has continued. Earlier assessments of handicap are welcomed by parents who seem to worry more, and earlier, than in times gone by. The Education Department has continued to support this policy by providing welfare assistants and during this year has agreed to assisting parents with fees for play groups where attendance has been felt necessary on medical grounds. It has continued to be a pleasure to work together with the Education Department personnel, and in particular with Mr. A. E. J. Best, Senior Assistant Education Officer, who never fails to be helpful.

(iv) The Computer

The Computerised 10M (C10M) has now been with us for more than a year and many of the teething troubles have been ironed out ; the enormous advantage of being able to obtain records within minutes is a tremendous saving in time for everyone, and all medical officers are now familiar with the form and realise its advantages.

The computerised audiogram form has now been added.

There has been international interest in our computer system with regular enquiries from home and abroad and many visits by other authorities to see Mr. F. H. Livesey for discussions.

(v) Immunisations

Diphtheria, tetanus and polio boosters are now given routinely at pre-school medical exams and those children who fail to attend for this are examined and innoculated when seen in school. B.C.G. is given in the second year at secondary school and booster tetanus and poliomyelitis is offered at 14 years.

Rubella immunisation is now offered to 11 and 12 year old girls and by next year it will be possible to give this on entry to secondary school.

(vi) Vision Testing

School nurses continue to test the vision of all children every year. The situation in the secondary schools continues to be a problem particularly since the raising of the school leaving age and the additional number of children now in secondary schools. The shortage of school matrons continued to hamper the programme.

(vii) Eye Clinics

The appointment of a part time orthoptist in the South of the County has been of tremendous value and waiting lists have been eased to an extent, but waiting lists continue to be a problem in some areas and it is difficult to find the answers. All children are being offered an appointment with a consultant initially but increasingly they are being referred on to the supplementary ophthalmic service for follow up.

(viii) Audiology

Routine audiometric testing of all 6 year old and 11 year old children now takes place during term time, and the special clinics arranged in all holiday times, including half terms, are booked well in advance and much appreciated by g.p's and m.o's and all involved in the well being of the children.

Where the audiology technicians have problems either with very young children or perhaps handicapped children, the Senior Teacher of the Deaf, Miss E. M. Lambert is consulted and she and her team see the children and test them.

(See statistics on page 82)

(ix) Education of the Deaf

Miss Lambert and her staff continue to do wonderful work with our deaf and partially hearing children.

The service for Deaf and Partially Hearing continues to expand, the new Peripatetic Teacher who joined the team in September has brought the total to 8. Gloucester City has opened a new Unit at The Moat Junior School, Matson, and it is hoped to establish an Infant Unit at the Moat Infants School during the coming year. Gloucestershire children will be able to use this school. This will mean that we will have a 2 class unit in the South of the County, a primary unit for partially deaf children South of Gloucester and 2 primary units and 1 secondary unit in and around Gloucester.

The teachers of the deaf feel that the contact with the student health visitors during their period of practical training and their visits to the units are extremely useful. The numbers of pre-school children referred by the health visitors for screening in the home has risen significantly. The total number of pre-school children referred from all sources in 1972 was 83. As most of the pre-school children seen by the speech therapists have their hearing tested, it is anticipated that there will be a much greater number in 1973.

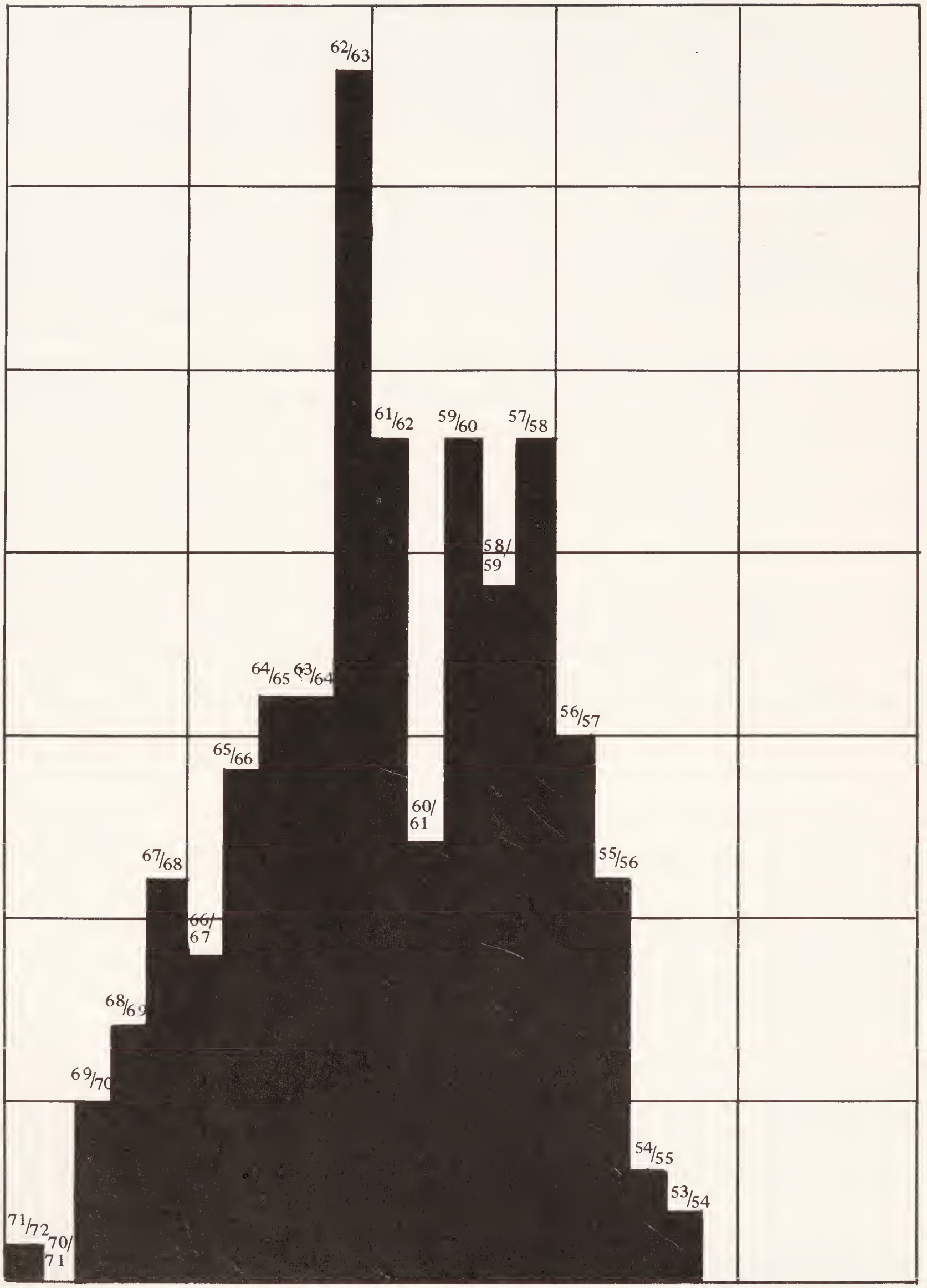
There are now 33 Gloucestershire children in County and City Units, but some of the infants attended on a part-time basis before being admitted full time. Many deaf and partially hearing children have successfully attended pre-school play groups, and the fees for attendance have been paid by the Education Committee since September, 1972.

A survey of young people with hearing aids leaving school in the years 1969-71 was carried out to assess the problems they had encountered in finding and keeping jobs. It also looked at their participation in any form of further education and their own wishes to have special classes for the partially hearing in a number of different centres. In addition, the survey considered the social integration or otherwise of these young people and the extent to which they still used their hearing aids. An evaluation of the results is still going on, and it is hoped that some of the suggestions put forward can be followed up by the Service, calling on the skills of people in other spheres.

One of the teachers of the deaf completed a year's advanced training at Manchester University Department of Audiology and Education of the Deaf, and the teacher from a Unit seconded for initial training as a Teacher of the Deaf achieved a pass with distinction. All the teachers of the deaf attended short courses and many one day course/conferences, as well as continuing to provide lectures and information for teachers and pupils in normal schools.

We are indebted to the Senior Teacher of the Deaf and her staff for their enthusiasm and continuing interest and service they give to our children.

More and more " Rubella " children are coming to light, partly with hearing defects and partly by way of learning difficulties etc. The chart below, of children with hearing aids, shows the Rubella years quite definitely.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65/66
60/61
67/68
55/56
66/67
68/69
69/70
54/55
53/54
71/72
70/71

The graph shows the fluctuations in the numbers of children with hearing aids. The highest peak is the group born between September, 1962 and March, 1963, aged 9 or 10 years. Seventeen of these are in the South of the County.

The children are placed in school years, that is, their age on the 1st September in any one year.

Towards the end of the year plans were made to test the sera of pregnant women in the Gloucestershire area for Rubella antibodies, and arrangements made to give all negative reactors Rubella vaccine. With the routine immunisation of all girls at 11 years of age this problem should eventually cease to arise.

(x) Speech Therapy

Our Senior Speech Therapist, Mrs. Margaret Heaven, has been with us now for a year and it is to be wondered how we ever managed before she came for she has drawn together our team of therapists and done so much to improve the service.

(a) *Staff*

There is now a full establishment of staff, the first time for many years. One full-time therapist left during the year and 2 full time and 3 part time were engaged, bringing the total to 4 full time and 11 part time (the equivalent of 7 full time) plus a senior speech therapist. This county had anticipated the recommendations of the Quirk Report to encourage the return of married women, by allowing flexible hours, sessional work and working in term time only, if desired. Even with a full establishment this is below the ratio of one speech therapist per 10,000 school children recommended as long ago as in the Annual Report of 1949. The Quirk Report recommends 1 ; 5,000 as being more realistic. Consequently the service offered is still not as good as desired, especially to the special schools.

The Report of the Committee of Enquiry appointed by the Department of Education and Science into the Speech Therapy Services (the Quirk Report) was published in October. This is a most significant document affecting the profession and its recommendations are receiving careful study in this County. Earlier in the year a comprehensive report on the Speech Therapy Services in Gloucestershire was prepared and recommendations for increased efficiency and future development were made by the Senior Speech Therapist. Luckily they seem to be on the same lines as those suggested in the Quirk Report although the Quirk Report advocates even more radical changes.

(b) *Accommodation and Equipment*

Every effort is being made to provide each area with at least one clinic which has the pre-requisites of quietness, space and good equipment. It has been possible to provide more equipment particularly tape recorders, a range of tests of speech and language and play material. Therapists in some areas still spend a lot of their time travelling and working in the schools. It is hoped to keep this to a minimum but it is often difficult because of the school time which could be lost by children travelling to clinics. The speech therapists are often under pressure from Head Teachers to visit schools weekly, but as each full time worker is in charge of at least 50 schools this is clearly impossible.

(c) *Clerical Help*

The Quirk Report recommends that speech therapists should be provided with an adequate supporting staff of clerical and secretarial workers. This is possible for some based on the new Health Centres but not in all parts of the County.

(d) *In-Service Training*

One speech therapist attended a course organised by the South West Provincial Council and another attended a conference of speech therapists. Regular training days have been started in the County to help therapists keep abreast of the latest methods and to act as " refresher courses." This helps to encourage the return of married women, but perhaps the most important aspect is that it allows the staff to meet to discuss professional problems and prevents the feeling of isolation.

(e) *Talks*

A series of talks were given as part of the training of health visitors, nursery nurses and play group leaders. Others have been given to child care students, to a course in developmental paediatrics, at the Annual General Meeting of Child Health Centres, parent groups at child health centres and as part of the programme during Mental Health Week.

(f) *New methods of treatment*

To try to offset the previous lack of staff and the present rather inadequate ratio, other methods of treatment rather than regular weekly attendance at clinics have been investigated.

(g) *Language and Speech Units*

Because of the success of the Speech Unit at Filton for Severely Handicapped Children, a recommendation for other such units has been prepared. The " babies " class at Filton will open in January, 1973 and places have already been taken. There are thus 2 classes in this unit with an age range of 5 years to 11 years.

It is amazing how attractive this whole unit is now. What started as a shabby old unused 2 class block has been nicely decorated and furnished and is greatly appreciated by both staff and pupils. The closing off of a small part of the infants' room to make a quiet area for intensive therapy will prove a great asset.

It is hoped to establish at least one more such unit in the North of the County preferably between Cheltenham and Gloucester. There is need too, for a Unit in the Forest of Dean area which has a very high proportion of speech problems and one very over worked therapist, who does excellent work, but is so hampered by distances.

(h) *Speech and Hearing*

The establishment of two speech and hearing teams is now imminent, one for the North of the County and one for the South ; we are fortunate that our speech therapists and teachers of the deaf are such nice friendly people and get along well together. We felt there was a special need to complete such a team by the addition of a medical officer with a special interest in the development of speech and hearing and a school psychologist with similar interests. Fortunately for us a medical officer and a school psychologist in the South and one of each in the North have this interest and so the teams are complete. There is now an urgent need for a Speech Unit in the Gloucester area and the Education Department is trying hard to help us in this. The integration of such handicapped children into normal schools by degrees, is of course of the utmost importance.

(i) *Physiotherapy*

The appointment of Miss Mary Bailey as Senior Orthopaedic After-Care Sister has done much to unify our team of physiotherapists in the same way as with Speech Therapy. At last the physiotherapists have a feeling of belonging to a team and have regular meetings and conferences.

We were sad to say goodbye to Mrs. Jane Pyman who worked so hard using the Bobath method, with so many of our spastic children but we welcome 2 part time physiotherapists to our staff.

We are fortunate in having a full establishment of physiotherapists but this is woefully short of the real need.

(xi) School Psychological Service

There has been continued co-operation between the school health service and the School Psychological Service. Where E.S.N. assessment is necessary the assessment together with the social report is completed by the psychologist where there is no medical factor involved. This year has seen much greater liaison and discussion between the psychologist and medical officer but it is to be hoped that this will improve still further. Far too often both a psychologist and a medical officer see a child without the other knowing, this probably arising through the diversity of referral to the School Psychological Service and Child Guidance Clinics to which the School Psychologists are attached.

(xii) Child Guidance

The problem of having medical officers attached to Child Guidance Clinics is that the medical officers become so interested that they leave us to become part of the child guidance team. Dr. Olwen Ockelford left us for this reason but is a valuable link with our Health Service since she already knows so many of the children and the schools. Dr. Michael Gryspeerdt is gradually leaving us for the same reason and now does only 3 sessions per week for us, his remaining time being spent in psychiatry but it is comforting to know that these doctors who know us so well are still looking after our children.

Seven Springs Holiday Projects

Children from the Child Guidance Clinic continue to benefit from the four weeks' holiday periods booked at Seven Springs House. The same children are welcomed back and contact is kept with them in between so that the family is supported between periods of what, in some cases, amounts to fairly intensive therapy. If this fails to contain a child who later needs residential schooling, then the Clinic contact with this school is able to be far more helpful because the child's difficulties are so well known.

The Mothers' Group has now had four periods together over four years. They have formed a really cohesive friendship and support each other very closely, particularly a mother in bereavement and another in a mental hospital.

(xiii) Schools for maladjusted

Cam House School, our only residential school for maladjusted boys has had an eventful year. They have a new language laboratory which gives a fully balanced course for the more intelligent, and is used also for remedial reading.

There have been 3 camps in the long holidays, which go a small way to alleviate the formidable problems a maladjusted boy faces with too much time on his hands in an environment which so often caused the maladjustment—these problems increase and it is essential that there should be hostel accommodation for those children who really should not go home ; so many of the boys are rejected and it is surprising to know that quite a number of parents telephoned Mr. Stanway, the Headmaster, shortly before Christmas to say they didn't want their boy home and would he please arrange something for the child.

Barbecues have been held each half term in the winter terms.

Mr. Stanway has completed the Advanced Diploma Course in Bristol which lasted for 1 year, and 1 member of his staff will attend this course for the next 3 years. There is one extra member of staff at the school who covers for each teacher who goes for further training.

A big problem at the school is the House staff who, though interested and excellent, usually only stay for 2 years then leave to obtain further experience.

Our own day school for maladjusted children continues to be full. When a child is thought to be ready to return to normal school he is sent out ' on trial ' for the first term and his place is still available for him at the maladjusted school should he have problems. This is a very steadying influence on the child and he does not feel completely cast off.

We are also able to take up places in the day school for maladjusted in Cheltenham Borough.

83 children are in residential schools outside the area.

(xiv) Special Schools for Educationally and Mentally Handicapped Children

Our 3 day/boarding schools for E.S.N. children are still full with more and more of these children being maladjusted in addition. An additional day E.S.N. school opened during the year bringing our total to 4 day E.S.N. schools and we are able to place children in 2 day schools in Cheltenham.

The five day schools for severely mentally handicapped children are even more hard pressed than last year. In two of these, where there are also adult training centres, the position should be alleviated by Easter, 1973, when the adults from both centres will be accommodated in a new Adult Training Centre.

Staff shortages in another school have given rise to an even lengthening waiting list.

Even so, in an area like Gloucestershire, there is an urgent need for hostels for these children as travelling distances are in many cases impossible.

Towards the end of the year the National Children's home at Ebley, which is a reception home for babies, found that there were fewer and fewer babies coming to them. They already run a flourishing Nursery School for their own children and we have been able to place normal or ' at risk ' children here. Mr. Patient, the Area Director, felt that he had the staff and accommodation to offer some help to us. After a long conference he and his staff agreed to take a few urgent special care children who had been waiting for placement for a long time. The courage and good will of the staff was such that no sooner said than done, and one week after reaching their decision they interviewed parents and children and 3 days later the children were admitted on a daily basis. It is hoped that in time when the staff get experienced and are more used to these children, some will be admitted to board there and attend the local S.S.N. school. We admire their good will and generosity and are grateful for the help that they offer.

It has become increasingly difficult to find places for those S.S.N. children who can no longer live at home. Parents are expected to look after these little ones since long term care is at a premium, with the resultant home problems with other normal children and the frequent break up of marriages. It is imperative that more residential accommodation is made available, preferably in small units, for these children. However, much support of the family is available from health visitors and social services and other organisations but many families are strained beyond endurance by their unfortunate little people and the tragedies that result could and should be avoided.

(xv) Physically Handicapped

We continue to have children placed in the day school for Physically Handicapped children in Gloucester ; a new school in Bristol has opened for day and residential children and we have 16 children there. A nursery unit for physically handicapped children has also opened in the Bristol area, Claremont, and 6 of our children attend ; this unit has a special link with the Spina Bifida Unit and is already helping so many of our children.

The Independent School for Physically Handicapped children, St. Roses at Stroud, is our greatest standby for they have increased their number of places of day children and we now have 19 attending daily as well as 9 residential pupils. They have also increased their number of nursery places and we have 7 attending. There are plans with D.E.S. for the building of a special care unit.

A new medical unit and kitchen extension costing £26,000 has improved the facilities for nursing care and self help for the spina bifida children ; there is a comprehensive approach to the total life situation for cerebal palsy and spina bifida children in education with excellent physiotherapy, speech therapy, occupational therapy and nursing care and training. A parent/staff association has been started during this year.

We also have near the Gloucestershire border a National Children's Home residential school for Physically Handicapped children (Penhurst School) where we place children. This school is situated in the North Cotswolds and one day we hope that they will accept day pupils—the enormous advantage of keeping physically handicapped children in their own homes wherever possible cannot be overstressed. 179 physically handicapped children are being educated in special schools both in Gloucestershire and outside the area of whom 31 are blind or partially sighted, 13 are deaf or partially hearing and 3 are epileptic.

(xvi) Head Lice

The improvement in the overall situation regarding head lice since the use of malathion is most encouraging. Constant vigilance by school nurses is ever necessary in the trouble spots, but at present we seem to be winning this battle.

(xvii) Chiropody

We still have not achieved a School Chiropody Service and this is most disappointing. This appears to have been a bumper year for plantar warts in Gloucestershire .We feel we can no longer wait for enough chiropodists to provide us with this service, so we have started training school nurses to treat plantar warts and hope to have a full school service in this respect.

(xviii) School Buildings

Conditions in many of the secondary schools have been very difficult as far as school medical inspections are concerned this year due to extensions to cope with the extra school year. One can only sympathise with the staff of these schools and rely on them to keep us informed of any urgent problems since an attempt at an organised medical inspection is out of the question.

The little caravan for use where accommodation for medical inspections is non-existant has been fully booked during the year and though far from ideal has proved its worth. There is a strong case for a bigger and better caravan for this purpose in the future.

(xix) Health Education in Schools

Health visitors, health education staff and medical officers, have continued to give talks on a variety of subjects, both in schools and to parent teacher associations and mothers' clubs.

There have been a number of enquiries during the year from parents regarding sex education and family planning. In Gloucestershire we have an advisory system in schools called Education in Personal Relationships (EPR) ; a number of the secondary school staff is selected and specially trained in all aspects of personal relationships so that the pupils have the benefit of this advice throughout their secondary school years. So far discussions in school on contraceptives are rare and some schools opt out of the scheme completely. Parents of children at one or two of these schools have specifically requested that their children should be informed regarding sex and sex education and we are fortunate in that the majority of our medical officers are Family Planning Association trained and are able to do this—much depends though on the attitude of the Head Teachers in permitting this type of education in their schools. The E.P.R. arrangements have been active since 1962 and the training is at this moment under revision with particular reference to family planning and drugs.

(xx) Enuresis Clinic

The clinic in the Quayside Wing continues to be well patronised and general practitioners are increasingly availing themselves of its advantages for their patients.

Our second clinic opened during the year at Cirencester and is beginning to become known and used.

(xxi) R.O.S.L.A.

As previously mentioned, buildings to contain this extra school year have gone up rapidly. One hopes that " Education " in this extra year will go as smoothly. All sorts of problems come to mind, the biggest of which must surely be the convincing of the considerable number of children who were all set and ready to leave school at 15. This will be a real challenge to school staff but surely also a task to be accepted by the School Health Service. One feels that there will be in this first extra year, much resentment by the pupils who had firmly expected to leave school and be " adults " but now find themselves still " school kids." Tactful handling by school staff, imaginative occupation and constant liaison with the school medical officer seems imperative. This should be an excellent opportunity for full discussions on drugs, sex and family planning, among the many other subjects which must occupy these children's thoughts.

(xxii) Research

During the year Benhall Infants School was completed in Cheltenham Borough. This school, the only one of its kind, was constructed according to the scheme " building an environment." There is controlled lighting, heating and ventilation and it is built on the open plan design. It is being monitored from the architectural side, electricity usage and space usage by the Department of Architecture, Cardiff University, and the Electricity Council, and compared with another infants school of recent but more traditional design.

The School Health Service is involved in comparing the physical and mental health and wellbeing of pupils and staff in the two schools. The study revolves round the September 1972/Spring 1973 intake of 5 year olds and will be followed for at least two years. From the medical aspect, height weight, vision

tests and social development, have been noted, together with details of family life such as occupation of father and mother, whether the child has school dinners (free or not), etc., and the number of absences from school.

Benhall took in initially the same number of 5 year olds as the control school in September but the the school was only half full and the first data that we have shows that the sickness rate, or absence from school in the 5 year olds at Benhall School was only half the comparable sickness rate at the control school. This is not significant of course, until both schools reach similar attendance figures, but it will be interesting to compare the Gunzburg charts after these children have been attending school for 2 years.

(xxiii) Nursery Education

A Committee has been formed to plan for nursery Education with special reference to the over crowded and deserving areas. It is hoped that Nursery Education will be provided in 6 areas in the County where young children are most deprived.

It is interesting to note that a survey in these 6 areas shows a very small proportion of " latch-key " children attending Infant schools but there is surely a large proportion of children from disinterested homes where there is little or no stimulation and seldom a good square meal, so the sooner nursery education comes to these areas the better, and preferably provision until 6 p.m. with a solid evening meal provided.

(xxiv) School Meals Service

All meals served in the Authority's schools are planned to meet nutritive standards laid down by the Department of Education and Science in 1965, which ensure that half the pupil's daily protein requirements, and one-third of their calorie needs are met, together with the requisite mineral salts and vitamins appropriate to a main meal.

The Authority is conscious of the need to keep the interest of the pupils served and, at the same time, to educate them in good dietary habits. A handbook of recipes—available since 1960—has been vastly expanded over the last few years with these points in mind—a supplement of some 40 additional recipes being issued for use in secondary schools only. Menus are planned four weeks in advance by cook supervisors, following a pattern laid down by the School Meals Organiser, designed to give the maximum variety and appropriate nutritional content, within the cost limits current at the time. Naturally, cook supervisors take account of the tastes of the pupils in their school.

The wide range of dishes, and the catering skill required to reach the standard in the meal service schools have a right to expect, makes it essential for cook supervisors and as many of their staff as possible, to have training. All cook supervisors undertake an intensive five week course, before taking up their appointments, and attend meetings and refresher courses during the time of their employment to enable them to keep up with the changes and extensions to the service that are taking place.

Many of these changes are to be seen in the secondary schools where a different style of menu is expected to meet the changing tastes of older pupils. The introduction of a choice in the main dish served has been introduced in a number of secondary schools over the last eighteen months, and 14 schools have a separate sixth form service, run on college refectory lines.

Pupils requiring a special diet are catered for—diabetic and coeliac diets being the most common. The school medical officer advises the School Meals Organiser of individual cases—providing a diet sheet. A copy of this is taken to the cook supervisor by the Area School Meals organiser who discusses it in detail—issuing authority for the purchases of the necessary special ingredients. Medical officers identify pupils needing more general diets i.e., for obesity etc., for which special arrangements are also made.

The School Meals Organiser, and the schools, have appreciated having copies of reports on bacteriological counts following swab counts from crockery and equipment in school kitchens. The number of unsatisfactory reports have been very few—but the tests themselves have alerted canteen staff to the importance of following, meticulously, the recommended washing up procedure.

Meals and Milk Uptake

The meals uptake was affected dramatically by the increase in charges of April, 1971. There was a full recovery from the low figure, given below, as far as numbers were concerned in 1972, but the percentage dining was not restored. The continuation of the practice of pupils' bringing sandwiches to school, particularly in secondary schools, accounts for this anomaly.

The number of junior pupils identified by the medical officer as needing milk on health grounds is not high, but recommendations continue to be made.

School Meals Service

	1970	1971	1972
Number of children taking meals daily ...	55,500	51,626	59,355
Percentage of number on roll who take meals	74·8	62·3	70
Number of children bringing sandwiches ...	2,921	7,716	6,499
Percentage of children in Infants Schools taking milk	96	96	96
Number of children having milk on medical grounds	—	27	47

(xxv) Dental Service

The report of the Principal School Dental Officer is shown on page 54.

(xxvi) Swimming Pools at Schools and other County Premises

During the year a further six pools were completed bringing the total number of pools in use at County premises to 56. Three of the new pools were covered pools provided by the County Council at new or enlarged school sites. In one instance the pool forms part of a sports complex which is open to the public. In addition to those at schools, five private pools are available for use by primary schools and these are regularly inspected.

There were a number of proposed pools in various stages at the end of the year and new enquiries are continually being received. As the number of pools increases, the problem of overall supervision and maintenance referred to in last year's report becomes more pressing.

Summary of Swimming Pools at Schools and other County Premises

	No. of Pools	Pools with filtration plants	Heated pools	Covered pools
1970	44 (16)	39	18	4
1971	50 (21)	46	24	4
1972	56 (23)	52	29	7

Figures in brackets are prefabricated liner pools.

Pools under construction at end of 1972—6 (4)

(xxvii) Number of Schools and Children in Attendance

COUNTY (excluding Cheltenham), January, 1973

	No. of Schools	No. on Registers
1. Nursery	1	48
2. Primary	329	56,224
3. Secondary	48	33,906
4. Special	18	1,224
Total	396	91,402

CHELTENHAM EXCEPTED DISTRICT

	No. of Schools	No. on Registers
1. Primary	28	7,859
2. Secondary	11	5,571
3. Special	4	380
Total	43	13,810
Gloucestershire Total	439	105,212

STATISTICAL TABLES

Children Requiring Education at Special Schools

	Newly Assessed	Placed in Year	At end of year			
			Requiring Places		Attending	
			Day	Boarding	Day	Boarding
1. Blind	3	2	—	1	—	13
2. Partially Sighted ...	5	4	1	3	2	16
3. Deaf	—	—	—	—	5	5
4. Partially Hearing ...	2	1	—	—	41	5
5. Physically Handicapped ...	33	28	5	3	72	34
6. Delicate	12	7	—	—	6	17
7. Maladjusted ...	56	39	—	20	86	120
8. E.S.N.	186*	231	116	6	1,011	189
9. Epileptic	1	1	—	—	—	3
10. Speech Defects ...	3	—	—	1	14	1
Total	301	313	122	34	1,237	403

*Of the 186 children, 51 were assessed by medical officers and 135 were assessed by educational psychologists.

MEDICAL INSPECTION AND TREATMENT

PART 1.—MEDICAL INSPECTION OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS (INCLUDING NURSERY AND SPECIAL SCHOOLS)

Table A—Periodic Medical Inspections

Age Groups inspected (By year of Birth)	No. of pupils who have received a full medical examination	Physical Condition of Pupils Inspected		No. of Pupils found not to warrant a medical examinat'n	Pupils found to require treatment (excluding dental diseases and infestation with vermin)		
		Satisfactory	Unsatisfactory		for defective vision (excluding squint)	for any other condition recorded at Part 2	Total individual pupils
		No.	No.				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1968 and later	2,860	2,860	—	—	31	196	227
1967	6,060	6,060	—	—	84	450	527
1966	1,988	1,988	—	—	35	106	127
1965	712	712	—	—	12	28	38
1964	1,016	1,015	1	—	66	79	119
1963	87	87	—	—	4	6	10
1962	51	51	—	—	6	2	8
1961	36	36	—	—	5	1	6
1960	142	143	—	58	22	8	24
1959	183	183	—	480	21	9	28
1958	92	92	—	438	12	8	18
1957 and earlier	48	48	—	107	11	8	11
Total	13,276	13,275	1	1,083	309	913	1,179

Column (3) total as a percentage of Column (2) total 99.99%

Column (4) total as a percentage of Column (2) total 00.01%

Table B—Other Inspections

Number of special Inspections	1,471
Number of Re-inspections	9,197
Total	10,688

Table C—Infestation with Vermin

(a)	Total number of individual examinations of pupils in schools by school nurses or other authorised persons	96,896
(b)	Total number of individual pupils found to be infested	745
(c)	Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	201
(d)	Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	—

Part 2.—Treatment of Pupils

Table A—Eye Diseases, Defective Vision and Squint

	Number of cases known to have been dealt with
External and other, excluding errors of refraction and squint	62
Errors of refraction (including squint)	2,843
Total	2,905
Number of pupils for whom spectacles were prescribed	1,210

Table B—Diseases and Defects of Ear, Nose and Throat

	Number of cases known to have been dealt with
Received operative treatment :—	
(a) for diseases of the ear	146
(b) for adenoids and chronic tonsilitis	784
(c) for other nose and throat conditions	164
Received other forms of treatment	233
Total	1,327
Total number of pupils still on the register of schools at 31st December, 1972, known to have been provided with hearing aids :—	
(a) during the calendar year 1972	34
(b) in previous years	229

A pupil recorded under (a) above should not be recorded at (b) in respect of the supply of a hearing aid in a previous year.

Table C—Orthopaedic and Postural Defects

	Number known to have been treated
(a) Pupils treated at clinics or out-patients departments	4,055
(b) Pupils treated at school for postural defects	—
Total	4,055

Table D—Diseases of the Skin

(excluding uncleanliness, for which see Table C of Part 1)

		Number of pupils known to have been treated
Ringworm	(a) Scalp	3
	(b) Body	4
Scabies	... ...	28
Impetigo	... ...	15
Other skin diseases	... ...	5
	Total	55

Table E—Child Guidance Treatment

	Number known to have been treated
Pupils treated at Child Guidance Clinics	1,748

Table F—Speech Therapy

	Number known to have been treated
Pupils treated by speech therapists	1,033

Table G—Other Treatment Given

	Number known to have been treated
(a) Pupils with minor ailments	1,038
(b) Pupils who received convalescent treatment under School Health Service arrangements	22
(c) Pupils who received B.C.G. vaccination	3,970
(d) Other than (a), (b) and (c) above	1
Total (a) - (d)	5,031

AUDIOMETRIC TESTS, 1972

	County	Cheltenham Borough	Total
1. *Children in their 6th year*			
Number of schools attended	294	20	314
Number tested	8,609	1,027	9,636
Failed :— One ear	355	61	671
Both ears	255		
	610	61	671
2. *Children 1st year Secondary*			
Number of Schools attended	27	11	38
1st year tested	3,497	1,030	4,527
Failed :— One ear	62	48	110
Both ears	36	—	36
	98	48	146
3. *Primary School ; Retests and Specials*	2,023	375	2,398
4. *Secondary : Retests and Specials*	87	48	135
5. *Clinics at Health Centres, Group Practices, Schools during Holidays.*	671	160	831

REPORT OF SCHOOL HEALTH SERVICE FOR CHELTENHAM EXCEPTED DISTRICT, 1972

DR. T. O. P. D. LAWSON, SCHOOL MEDICAL OFFICER

The staff of the Cheltenham School Medical Service consists of two School Doctors, two Speech Therapists, one Physiotherapist, two School Nurses, fourteen Health Visitor/School Nurses, and a clerical staff of four. The School Dental Service consists of three Dental Surgeons, three Surgery Assistants and one clerk.

1. Medical Inspection at School

During 1972 2,438 children were given routine medical examinations. All children are examined on entry for the first time to a maintained school, and a selective medical is carried out during the year in which they are eight years of age, and again during their last year in school.

In addition to these routine inspections, children can be seen at any age by the School Doctor if requested by a parent, teacher or nurse.

With regard to the selective medical examinations, the parent of each child is asked to complete a questionnaire and each child has a vision test. The completed questionnaire and result of the vision test are put with the child's school medical record for the School Doctor to scrutinise and decide whether a medical examination is necessary. The Head Teachers are also consulted and can indicate any children they wish to be seen. If any parent fails to return a questionnaire, the child is selected for medical examination.

Parents are invited to be present at all examinations and if defects are found the child can be referred to the family doctor for treatment when necessary, or re-inspected at school at a later date in order to assess progress. Ophthalmic cases are referred direct to the Hospital Eye Clinics and direct referrals are also sometimes made to the Child Guidance Clinic and to the School Psychological Service.

2. Minor Ailment Clinics

These clinics are held by appointment on Monday and Friday afternoons for children suffering from minor injuries such as sprains and abrasions, or other ailments, such as boils, warts and athlete's foot. Treatment is carried out by the School Nurses under the supervision of a School Doctor. During school holidays minor ailment clinics continue to be held on the usual days. During them time additional clinics are held weekly at Whaddon, Oakley and Elmfield schools.

3. Enuresis Clinic

The facilities offered by the Enuresis Clinic are still very much in demand and are greatly appreciated by the parents. One of the local Consultant Surgeons has offered to see cases referred to him from the clinic when necessary.

4. Prevention of Tuberculosis

B.C.G. vaccination against tuberculosis is offered to all children of thriteen years and over. The acceptance rate for 1972 was 78·4%.

5. Ascertainment of Handicapped Children

Children who fail to make satisfactory progress in the ordinary school are referred by the Head Teacher for investigation and assessment. Those children who are considered to be handicapped are reported to the Education Committee and recommended for transfer to the appropriate special school.

We have excellent co-operation with the special schools in Cheltenham and many individual cases are discussed with the Head Teachers before a final decision is made. This co-operation on an informal basis is a great help to the School Medical Officers and is best in the interests of the children concerned.

6. Diphtheria and Tetanus Immunisation

Immunisation is always discussed as a part of the routine school medical examination and parents are urged to accept the necessary booster injections for their children.

7. Poliomyelitis Vaccination

Booster doses of oral poliomyelitis vaccine are offered to all children soon after they commence school.

8. Orthopaedic Defects

A physiotherapy clinic is available as part of the School Health Service. The majority of children who are referred to this clinic have either postural or foot defects and may be followed up after treatment by a School Medical Officer. Ultra-violet light therapy is also available and is of most help during the winter months.

9. Speech Defects

Regular speech therapy sessions are held at the School Clinic and in various schools throughout the town.

10. Audiometry in Schools

The policy of testing the hearing of all schoolchildren who have reached the age of six years has continued in the borough throughout the year and the routine testing of twelve-year-olds was instigated. Testing is carried out by a qualified audiometrician using a portable audiometer and, when necessary, cases are followed up and referred to the family doctor or hospital as required.

Audiometry sessions are held at the School Medical Clinic during each school holiday, when the children are seen by the Audiometrician and a School Medical Officer. Children may be referred to this clinic by the School Nurse, Doctor, Parent or Teacher, if a hearing loss is suspected.

(See statistics on page 82).

11. Health Education in Schools

During the year the Health Visitors gave ninety-five talks to a total of 2,826 pupils, covering Mother-craft, Personal Hygiene, Smoking, Venereal Disease, and other topics.

12. School Dental Service

There was an increase in the number of children examined both at routine school inspections and at the clinic. Nevertheless, there was a decline in the number of teeth filled and a small increase in the number of extractions. There was a significant rise in the number of anaesthetics given by dental officers.

More routine use of relative anaesthesia has been established throughout the year, enabling a greater number of nervous children to accept conservation treatment.

SCHOOL CLINICS

Clinic	*Address*	*Services*
Berkeley	Hospital	E, O
Bishops Cleeve ...	Tythe Barn	O, S
Bourton-on-the-Water	County Clinic, Station Road	A, D, S
	Moore Cottage Hospital	E
Cadbury Heath ...	Earlestone Crescent	D
Cheltenham	County Offices, St. George's Road	D, O, S
	33 St. Luke's Road	CG
	Health Centre, Hesters Way	O
Churchdown	County Dental Clinic, Albermarle Road	D
Cinderford	Dockham Road	E, O, S, D
	Dilke Hospital	O
Cirencester	Watermoor Road	A, CG, D, S, EN
	Memorial Hospital	E
Coleford	County Clinic, High Nash	D, E, O, S
Downend	Buckingham Gardens	CG, E, S, D, O
Dursley	The Sandpits	A, D, E, O, S, CG
Filton	Shields Avenue, Bristol, 7	A, D, E, O, S
Gloucester	Quayside Wing, Shire Hall	A, D, EN, O, S
Kingswood	Health Centre, Alma Road	D, S
Lydney	Church Road	D
	9 High Street	S
	District Hospital	E, O
Moreton-in-Marsh ...	T.A. Site, Stow Road	A, D, S
	District Hospital	E
Newent	County Clinic, West Block, Newent School	A, O
Patchway	Rodway Road	A, CG, D, S
Soundwell	Soundwell Road, Kingswood	A, E, M, O
Stroud	9 John Street	D
	Old Town Hall, The Shambles	CG, M, S, O
	Hospital	E, O
Tetbury	County Dental Clinic, The Close	D
Tewkesbury	Old Grammar School (County Clinic)	A, O, S, D, CG
	Hospital	E, O
Thornbury	Hospital	O
	Health Centre, Eastland Road	A, D, E, O, S
Winchcombe ...	County Dental Clinic, Back Lane	D, S, O
Wotton-under-Edge ...	Sym Lane	A, CG, D, E, O
Yate	Health Centre, West Walk	A, D, E, O, S
Cheltenham Excepted District	County Offices, St. George's Road	D, M, S, O

Index to Services :

A	...	Audiometry	EN	...	Enuresis
CG	...	Child Guidance	M	...	Minor Ailments
D	...	Dental	O	...	Orthopaedic
E	...	Eye	S	...	Speech

1972

TABLE I—BIRTHS AND DEATHS

Districts	Estimated Population	BIRTHS								DEATHS													
		Live Births				Still Births				INFANTS												ALL AGES	
										Under 1 year				Under 4 weeks				Under 1 week					
		Leg.	Illeg.	Total	Rate per 1,000 Pop.	Leg.	Illeg.	Total	S.B. Rate per 1,000 Total Births	Leg.	Illeg.	Total	Inf. Mort. Rate per 1,000 Live Births	Leg.	Illeg.	Total	Rate per 1,000 Live Births	Leg.	Illeg.	Total	Rate per 1,000 Live Births	No.	Rate per 1,000 Pop.
Urban																							
Charlton Kings	10,190	98	6	104	10.2	2	—	2	19	1	—	1	10	1	—	1	10	1	—	1	10	123	12.1
Cheltenham M.B.	75,560	860	94	954	12.6	6	—	6	6	14	5	19	20	10	4	14	15	8	4	12	13	937	12.4
Cirencester	14,060	201	17	218	15.5	2	—	2	9	5	—	5	23	5	—	5	23	5	—	5	23	177	12.6
Kingswood	30,630	491	15	506	16.5	6	—	6	12	9	1	10	20	7	1	8	16	6	1	7	14	281	9.2
Mangotsfield	22,870	277	16	293	12.8	4	—	4	13	3	—	3	10	1	—	1	3	—	—	—	—	218	9.5
Nailsworth	4,240	74	5	79	18.6	1	—	1	13	—	—	—	—	—	—	—	—	—	—	—	—	55	3.0
Stroud	19,430	258	23	281	14.5	4	—	4	14	4	—	4	14	4	—	4	14	2	—	2	7	288	14.8
Tewkesbury M.B.	9,010	152	14	166	18.4	1	—	1	6	4	1	5	30	3	1	4	24	2	1	3	18	126	14.0
TOTAL U.D.	185,990	2,411	190	2,601	14.0	26	—	26	10	40	7	47	18	31	6	37	14	24	6	30	12	2,205	11.9
Rural																							
Cheltenham	41,840	574	19	593	14.2	3	1	4	7	5	1	6	10	5	1	6	10	5	1	6	10	391	9.3
Cirencester	16,300	255	15	270	16.6	1	—	1	4	1	—	1	4	1	—	1	4	1	—	1	4	130	8.0
Dursley	21,520	303	25	328	15.2	3	—	3	9	4	1	5	15	2	—	2	6	2	—	2	6	220	10.2
East Dean	21,520	352	25	377	17.5	3	1	4	10	11	1	12	32	5	1	6	16	4	1	5	13	279	13.0
Gloucester	38,210	469	33	502	13.1	4	—	4	8	4	—	4	8	2	—	2	4	2	—	2	4	385	10.1
Lydney	16,000	202	8	210	13.1	—	—	—	—	2	—	2	10	2	—	2	10	1	—	1	5	158	9.9
Newent	9,470	123	8	131	13.8	2	—	2	15	5	—	5	38	4	—	4	31	2	—	2	15	102	10.8
North Cotswold	20,350	248	13	261	12.8	—	—	—	—	5	—	5	19	4	—	4	15	3	—	3	11	224	11.0
Northleach	7,140	82	6	88	12.3	2	—	2	22	—	—	—	—	—	—	—	—	—	—	—	—	83	11.6
Sodbury	69,400	1,320	56	1,376	19.8	12	—	12	9	26	1	27	20	16	1	17	12	14	—	14	10	557	8.0
Stroud	30,680	386	35	421	13.7	5	—	5	12	4	3	7	17	3	3	6	14	3	3	6	14	346	11.3
Tetbury	7,180	81	6	87	12.1	—	—	—	—	2	—	2	23	1	—	1	11	1	—	1	11	68	9.5
Thornbury	43,350	759	40	799	18.4	5	1	6	7	16	—	16	20	9	—	9	11	8	—	8	10	415	9.6
Warmley	24,260	271	7	278	11.5	3	—	3	11	3	—	3	11	2	—	2	7	2	—	2	7	191	7.9
West Dean	17,860	248	18	266	14.9	2	—	2	7	6	—	6	23	5	—	5	19	4	—	4	15	252	14.1
TOTAL R.D.	385,080	5,673	314	5,987	15.5	45	3	48	8	94	7	101	17	61	6	67	11	52	5	57	10	3,801	9.9
County Totals	571,070	8,084	504	8,588	15.0	71	3	74	9	134	14	148	17	92	12	104	12	76	11	87	10	6,006	10.5

The rates shown are the crude rates.

TABLE II—SUMMARY OF INFECTIOUS DISEASES

Districts	Scarlet Fever	Whooping Cough	Measles	Dysentery	Acute Encepha-litis	Malaria	Food Poisoning	Infective Jaundice	Tetanus	Meningo-coccal Infection	Tuber-culosis Pulmonary	Tuber-culosis Other	Meningitis
Urban													
Charlton Kings	—	—	4	—	—	—	—	—	—	—	—	—	—
Cheltenham M.B.	1	1	24	1	—	—	—	2	—	1	7	—	—
Cirencester	2	—	3	—	—	—	—	—	—	—	1	1	—
Kingswood	9	—	93	—	—	—	6	8	—	—	—	—	—
Mangotsfield	9	5	55	3	—	—	3	37	—	3	—	—	—
Nailsworth	7	—	5	—	—	—	—	2	—	—	—	—	—
Stroud	—	—	3	—	—	—	1	2	—	—	1	—	—
Tewkesbury M.B.	—	—	1	—	—	—	2	55	—	—	1	—	—
TOTAL U.D.	28	6	188	4	—	—	12	106	—	4	10	1	—
Rural													
Cheltenham	8	—	10	—	—	—	1	2	—	—	1	1	—
Cirencester	1	—	7	3	—	—	—	1	—	—	—	3	—
Dursley	1	—	7	—	2	—	3	2	—	—	—	—	—
East Dean	8	—	65	4	—	—	3	4	—	—	3	—	—
Gloucester	9	2	72	—	—	—	1	7	—	—	5	—	—
Lydney	1	—	9	—	—	—	—	3	—	—	—	—	—
Newent	4	—	6	—	—	2	2	—	1	—	5	—	—
North Cotswold	—	—	5	—	—	—	—	1	—	—	—	—	—
Northleach	—	—	—	—	—	—	—	1	—	—	—	1	—
Sodbury	5	1	294	7	—	—	14	6	1	—	7	2	1
Stroud	1	—	12	—	—	—	—	—	—	—	1	—	—
Tetbury	—	—	2	—	—	—	—	—	—	—	—	—	—
Thornbury	8	1	284	1	1	—	1	129	—	—	2	1	1
Warmley	2	2	118	6	—	—	1	15	—	—	—	1	—
West Dean	1	—	16	—	—	—	—	1	—	—	2	—	—
TOTAL R.D.	49	6	907	21	3	2	26	172	2	—	26	9	2
County Totals	**77**	**12**	**1,095**	**25**	**3**	**2**	**38**	**278**	**2**	**4**	**36**	**10**	**2**

TABLE III—CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE

B	Causes of Death	Total all ages	Under 4 weeks	4 weeks and under 1 year	1 -	5 -	15 -	25 -	35 -	45 -	55 -	65 -	75 and over
4	Enteritis and other Diarrhoeal Diseases	4	—	1	2	—	—	—	—	1	—	—	—
5	Tuberculosis of Respiratory System	11	—	—	—	—	—	—	1	—	1	4	5
6	(1) Late effects of Respiratory Tuberculosis	2	—	—	—	—	—	—	—	1	—	1	—
11	Meningococcal Infection	2	—	—	—	—	1	—	—	1	—	—	—
17	Syphilis and its Sequelae	1	—	—	—	—	—	—	—	—	—	1	—
18	Other Infective and Parasitic Diseases	12	1	1	2	—	—	—	—	3	2	1	2
19	(1) Malignant Neoplasm—Buccal Cavity, etc.	11	—	—	1	—	1	—	1	2	2	1	3
19	(2) Malignant Neoplasm—Oesophagus	31	—	—	—	—	—	—	—	1	11	7	12
19	(3) Malignant Neoplasm—Stomach	116	—	—	—	—	—	1	1	7	18	40	49
19	(4) Malignant Neoplasm—Intestine	183	—	—	—	—	—	1	5	10	39	59	69
19	(5) Malignant Neoplasm—Larynx	3	—	—	—	—	—	—	—	1	—	1	1
19	(6) Malignant Neoplasm—Lung, Bronchus	272	—	—	—	—	—	—	2	20	80	122	48
19	(7) Malignant Neoplasm—Breast	119	—	—	—	—	—	1	8	22	36	28	24
19	(8) Malignant Neoplasm—Uterus	50	—	—	—	—	—	2	4	10	11	15	8
19	(9) Malignant Neoplasm—Prostate	48	—	—	—	—	—	—	—	1	5	13	29
19	(10) Leukaemia	34	—	—	1	2	1	—	1	6	4	14	5
19	(11) Other Malignant Neoplasms	324	—	—	3	2	4	5	15	35	71	99	90
20	Benign and Unspecified Neoplasms	11	—	—	—	1	—	—	2	1	1	4	2
21	Diabetes Mellitus	58	—	—	—	—	2	—	2	3	10	13	28
22	Avitaminoses, etc.	1	—	—	—	—	—	—	—	—	—	1	—
46	(1) Other Endocrine, etc., Diseases	20	—	1	2	—	—	—	—	3	3	6	5
23	Anaemias	19	—	—	—	1	—	—	—	1	—	5	12
46	(2) Other Diseases of Blood, etc.	3	—	—	—	—	—	—	—	—	1	1	1
46	(3) Mental Disorders	4	—	—	—	—	—	—	—	—	—	1	3
24	Meningitis	4	2	—	—	—	—	1	—	—	1	—	—
46	(4) Multiple Sclerosis	9	—	—	—	—	—	1	2	2	4	—	—
46	(5) Other Diseases of Nervous System	59	—	2	1	6	2	4	1	3	6	16	18
26	Chronic Rheumatic Heart Disease	60	—	—	—	—	—	1	6	3	14	19	17
27	Hypertensive Disease	91	—	—	—	—	—	—	—	6	20	29	36
28	Ischaemic Heart Disease	1,585	—	—	—	—	—	4	20	92	253	509	707
29	Other forms of Heart Disease	366	—	—	—	1	—	2	2	6	7	82	266
30	Cerebrovascular Disease	800	—	—	—	—	1	1	5	26	73	198	496
46	(6) Other Diseases of Circulatory System	279	—	—	—	—	—	1	3	4	31	65	175
31	Influenza	23	—	—	—	—	—	—	1	2	2	7	11
32	Pneumonia	451	3	4	2	—	5	3	5	8	25	86	310
33	(1) Bronchitis and Emphysema	209	—	2	—	—	—	—	1	7	36	71	92
33	(2) Asthma	13	—	—	—	—	2	—	—	2	4	2	3
46	(7) Other Diseases of Respiratory System	63	3	7	2	1	—	1	—	—	10	12	27
34	Peptic Ulcer	35	—	—	—	—	—	—	—	1	—	13	21
35	Appendicitis	3	—	—	1	—	—	—	1	—	—	—	1
36	Intestinal Obstruction and Hernia	34	2	1	—	1	—	1	1	1	4	5	18
37	Cirrhosis of Liver	24	—	—	—	—	—	—	1	—	8	11	4
46	(8) Other Diseases of Digestive System	56	—	—	1	—	—	1	2	8	5	15	24
38	Nephritis and Nephrosis	28	—	—	—	1	—	2	—	3	3	7	12
39	Hyperplasia of Prostate	15	—	—	—	—	—	—	—	—	1	2	12
46	(9) Other Diseases, Genito-Urinary System	45	—	—	—	—	—	1	1	—	4	9	30
41	Other complications of Pregnancy, etc.	1	—	—	—	—	1	—	—	—	—	—	—
46	(10) Diseases of Skin, Subcutaneous Tissue	10	1	—	—	—	—	1	—	—	1	3	4
46	(11) Diseases of Musculo-Skeletal System	20	—	—	—	—	—	—	—	1	3	9	7
42	Congenital Anomalies	56	27	7	2	3	2	1	2	3	6	2	1
43	Birth Injury, Difficult Labour, etc.	32	32	—	—	—	—	—	—	—	—	—	—
44	Other causes of Perinatal Mortality	35	33	2	—	—	—	—	—	—	—	—	—
45	Symptoms and ill-defined conditions	46	—	11	1	—	—	—	—	—	—	4	30
E47	Motor Vehicle Accidents	82	—	—	2	7	29	7	13	6	8	7	3
E48	All other Accidents	81	—	5	4	8	7	5	4	4	11	11	22
E49	Suicide and Self-Inflicted Injuries	39	—	—	—	—	3	4	4	10	11	7	—
E50	All other External Causes	13	—	—	—	—	1	2	1	1	3	5	—
	Total all causes	6,006	104	44	27	34	62	54	118	328	849	1,643	2,743